BACKGROUND BRIEFING REPORT
WITH SEMINAR PRESENTATIONS

TEEN PREGNANCY IN CALIFORNIA:

EFFECTIVE PREVENTION STRATEGIES

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TEEN PREGNANCY IN CALIFORNIA: EFFECTIVE PREVENTION STRATEGIES

A Review of Teen Pregnancy Trends in California,
Effective Prevention Programs, and
Policy Options for Pregnancy Prevention

California Family Impact Seminar
M. Anne Powell, M.S.W., Director

California State Library Foundation
Sacramento, California
December 1994

This Background Briefing Report was prepared for the California Family Impact Seminar (CAFIS) to accompany the October 3, 1994 policy seminar entitled *Teen Pregnancy in California: Effective Prevention Strategies.*

The California Family Impact Seminar provides nonpartisan information to government officials and policymakers concerning issues affecting children and families in California. CAFIS is a project of the California State Library Foundation, which is committed to preservation of the cultural heritage of California, and is sponsored by the State Library California Research Bureau which performs policy research for the Governor and the State Legislature.

CAFIS is affiliated with the federal Family Impact Seminar in the AAMFT Research and Education Foundation and a part of the national network of state Family Impact Seminars.

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Copies of the CAFIS Background Briefing Reports may be obtained by contacting the California Family Impact Seminar, California State Library Foundation, 1225 Eighth Street, Suite 345, Sacramento, California, 95814, (916) 447-6331. Portions of the report may be photocopied for educational, teaching, and dissemination purposes provided that the proper attribution is given to CAFIS.

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CALIFORNIA FAMILY IMPACT SEMINAR

Promoting a family perspective in policies and programs.

State policymakers are challenged today by a host of family issues and problems that need to be addressed within the context of limited resources. There is a growing body of research on families, and on the numerous programs that seek to address family-related problems. Unfortunately, policymakers often do not have access to this current research and may instead rely on information that is out-of-date, biased, or inaccurate. This problem is exacerbated in California by the loss of state policy analysis resources due to ongoing budget cuts in the legislative and executive branches.

The ***California Family Impact Seminar (CAFIS)*** is a nonpartisan policy research and education project that seeks to provide accurate current information on family issues at state and local levels. ***CAFIS*** forums and briefing papers present cutting edge research on health and social indicators, and the development, implementation, and evaluation of public and private policies and programs.

***CAFIS* Goals**

- Provide state policymakers with up-to-date, solution-oriented, and objective information on family policy issues from a family perspective;
- Provide a forum for frank and open consideration of various policy dilemmas and policy options;
- Facilitate productive communication among state legislators, legislative policy staff, gubernatorial staff, state agency officials, and state agency policy staff, with program professionals, policy experts, and researchers from throughout the United States; and
- Generate a family-centered approach to information, moving from a categorical program focus on the individual child or parent to one that evaluates the issue or problem and potential solutions within the context of the family.
- Assist policymakers and governing institutions to develop effective family-centered policy.

***CAFIS* Seminar Format**

Each year ***CAFIS*** holds a series of four to six seminars in Sacramento specifically designed to educate and inform state legislators and executive branch officials and their policy staff, and to provide a forum for focused discussion. The current range of issues includes violence, child maltreatment, health care reform, family preservation, foster care, poverty, and literacy. The topics are chosen with guidance from the ***CAFIS*** Board of Advisors and the ***CAFIS*** Steering Committee.

Seminars are two hours in length. The first portion of the seminar is devoted to presentations by a panel of recognized experts who discuss research findings and program experiences at the federal, state, and local levels, and review a range of policy options. The presentations are followed up with a question-and-answer period allowing for discussion among the panelists and participants. Each seminar is accompanied by an in-depth Background Briefing Report and followed up with a Seminar Presentation Summary.

CAFIS is a project of the California State Library Foundation and is sponsored by the California Research Bureau, which conducts policy research for both the legislative and executive branches of state government. The 1994 seminar series is supported by grants from the Henry J. Kaiser Foundation and the Stuart Foundations.

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Virginia Duncan Kaser:

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INTRODUCTION

Policymakers are increasingly concerned with the escalating incidence of teen pregnancy. There is a growing belief that teen pregnancy and childbearing is harmful for the individuals involved, for community in which they live, and for society in general. Teen pregnancy is perceived as having serious social and economic consequences at all these levels. There is compelling evidence that, for example, teen pregnancy leads to long term dependence on government programs like Aid to Families with Dependent Children (AFDC), and that teen parenting generates a multi-generational legacy of poverty in a semi-permanent underclass. Teen pregnancy also raises health issues for both the mother and infant. Some view teen pregnancy as a moral issue which may jeopardize the traditional family as an institution.

Yet, the research linking teen pregnancy with the negative consequences of teen pregnancy and childbearing is inconclusive. Some research links teen pregnancy with increased welfare rolls, child abuse and neglect, and crime. Others see these problems as reflecting the more pervasive environmental and psychological ills faced by these teens in everyday life.

This background briefing report presents an overview of current research on teen pregnancy trends, its causes and consequences, and related social issues. The report also provides a historical account of teen pregnancy prevention programs and their effectiveness. Also included are the presentations and handouts of the October 3, 1994 seminar *Teen Pregnancy in California: Effective Prevention Strategies* held in the California Room (Rm. 4203) of the State Capitol. This is the first of two reports on teen pregnancy. The second report focuses on teen parenting and welfare dependency.

Chapter I describes teenage pregnancy trends, using state and national statistics. Chapter II describes the dimensions of teen pregnancy, including those factors most highly associated with its occurrence, and presents national and international comparisons. Chapter III provides an overview of the public prevention programs that have been implemented over the years to prevent teen pregnancy and examines evaluations of their effectiveness. This chapter also describes some of the more recent innovative approaches to preventing teenage pregnancy and the evidence of their success. Chapter IV discusses the policy options for teen pregnancy prevention.

For readers who desire more information about teen pregnancy issues, suggested readings are listed by topic at the end of the report.

CHAPTER I: TEENAGE PREGNANCY AND BIRTH IN CALIFORNIA: TRENDS AND CHARACTERISTICS[1]

Introduction

Adolescent pregnancy and childbearing in California is a serious problem affecting a wide range of communities throughout the state. Indeed, California has the dubious distinction of leading all 50 states in rates of adolescent pregnancy. Furthermore, after a steady decline over the years, these rates and those often childbearing have begun to climb sharply, in fact more sharply than in the U.S. as a whole.

The following is drawn from an unpublished report prepared by the Alan Guttmacher Institute (AGI) in September 1994 on what is currently known on a national basis using relatively abundant and authoritative data. The available data and, if possible, comparable information for California is reviewed by AGI.

There were limitations in the available data: National data may be of dubious usefulness when applied to state level considerations. Furthermore, until recently, data on Hispanics have been relatively sparse and data on Asian or other minorities (that are particularly significant for the California situation) have lacked specificity and detail. Local California data, on the other hand, have their own shortcomings: Information is often available only for local situations, for small and not necessarily representative population groups, or lacking altogether in some significant respect.

The selected national data presented in this chapter is referenced to AGI's 1994 publication, *Sex and America's Teenagers* (AGI 1994a). The publication contains much more extensive information, cites all sources of data and provides several hundred footnotes. AGI obtained the California-specific information from a variety of sources:

- 1980 and 1990 California county-level census tabulations;
- California vital statistics;
- 1990 California Office of Family Planning data;
- In addition, it is important to note that there are significant gaps in what we know about teenage sexual and reproductive behavior in California.

For the state, as a whole, they found no data on the actual numbers of teenagers who are sexually active, who become pregnant or who have abortions. For 1988 and a few earlier years these numbers have been estimated using national survey data. Furthermore, there is a paucity of information regarding the sexual and procreative behavior of men, in general; and of the men who father children with teenage girls, in particular.

[1] This chapter is drawn from an unpublished paper prepared by the Alan Guttmacher Institute (AGI 1994b). We are very grateful for their permission to include this material in our report.

National Overview

Teenage Sexual Activity in the United States

Although sex is common among teenagers, it is not as widespread, and does not begin as early as most adults believe:

- More than half of teenagers do not have sex until they are at least 17, and
- 20 percent of adolescents have not had sex at all by the time they reach 20.
- Nevertheless, at each age between 15 and 20, higher proportions of teenage men and women are sexually experienced today, more than they were in the early 1970s.

Today, 56 percent of women and 73% of the men have had intercourse before their 18th birthday. The trend towards engaging in sexual activity at younger ages has been most pronounced among young white women and the previously sharp differences in sexual activity according to race, income, religion or location have nearly disappeared. While the proportion of very young sexually experienced adolescents remains relatively small, those who engage in such risky behavior as smoking and drinking are more likely than others to have sexual intercourse. There are also troubling indications that some 74% of girls who have had intercourse before the age of 14 and 60% of those who had sex before the age of 15 had done so involuntarily.

Figure I-1

Source: Alan Guttmacher Institute, 1994b

Teenage Pregnancy in the United States

Most sexually experienced teenagers try to prevent pregnancy, and most teenagers succeed in doing so. Nevertheless, 1 million adolescents, or 12% of all women aged 15-19 become pregnant each year—19% of blacks, 13% of Hispanics and 8% of whites.

- Two-thirds of those pregnancies occur among 18 and 19 year old women and a substantial proportion of all abortions and births among all teenagers are attributable to this older age group. This is because the proportion of teenagers who are sexually active increases with age and because—as they get older—teenagers tend to have intercourse more frequently, are more likely to want to become pregnant, and, in the case of Hispanics, to be married.

- Some 85% of teenage pregnancies are unintended, but pregnancies among higher income teenagers are more likely to be unintended than those among poor and low income adolescents. Hispanic teenagers who become pregnant are somewhat more likely than blacks or whites to have wanted to become pregnant or, at least not to have cared whether they became pregnant or not.

Figure I-2

Source: Alan Guttmacher Institute, 1994b

Trends in Pregnancy and Birth

Teenage Reproductive Behavior

In many ways, teenage women in California are quite similar to other adolescents in the United States. Indeed, they are identical in some respects:

- Slightly over half are sexually experienced; and

- Only 6 percent have ever been married.

However, they differ in some important ways:

- Teenage pregnancy rates, as previously mentioned, are substantially higher in California than in the United States as a whole, with an annual rate of 154 per 1,000 females ages 15-19 compared with a national rate of 111 per 1,000.

- Induced abortion rates in the same age group are considerably higher in California than for the country as a whole—76 per 1,000, compared to 43 per 1,000, respectively. Put another way, 57 percent of adolescent pregnancies that do not end in miscarriage are terminated by abortion, compared to 45 percent nationally.

- As a result, California's birthrates were only slightly above the national level—58 vs. 53 per 1,000 in 1988. Still, in that year, while the state accounted for only 11 percent of the total U.S. teenage population, 13 percent of all teenage births in the country occurred in California.

Figure I-3

Source: Alan Guttmacher Institute, 1994b

Teenage Birthrates by Age

Birthrates increase steeply as teenagers get older, in large part because sexual activity increases. In addition, older adolescents are more likely to be fertile and to want to get pregnant.

- Birthrates among younger teenagers are relatively low—fewer than half of one percent of girls aged 13 and 14 give birth annually, and roughly four percent of girls in the next age group, 15-17, become mothers. These rates are identical or very similar in California and the United States.

- However, among older teenagers, aged 18-19, California's birthrates are somewhat higher than the rates experienced by 18-19 year old teenagers throughout the nation.

Figure I-4

Source: Alan Guttmacher Institute, 1994b

Teenage Birthrates by Race/Ethnicity

Teenage birthrates in California, like the United States, also vary significantly according to race and ethnic origin.

- Black teenage birthrates in California are somewhat lower than the national average, while the teenage birth rate among whites in California is nearly identical to the national average.

- In California, Hispanic birthrates among teenagers are somewhat higher than the nationwide average birth rate for Hispanics. This is most likely due to the heavy concentration of Hispanics in California who are of Mexican origin. The national average is based upon the birthrates of Hispanics from many different origins, including Cubans, who have relatively low birthrates compared to other Hispanics.

- However, in comparison, the teenage birth rate in Mexico is 94 births per 1,000 teens, compared with 117 births per 1,000 Hispanic teens in California.

- It appears that, in addition to cultural norms that value high and early fertility, Hispanic young women in California are faced with a variety of economic and social challenges that may leave them with fewer traditional restraints and little training or socialization in the skills necessary to be assertive or negotiate within potential sexual relationships.

Figure I-5

Source: Alan Guttmacher Institute, 1994b

Birth Rate Trends

Although trend data are not available for both California and the United States regarding teenage pregnancy or abortion rates, it is possible to look at trends in the teenage birth rate since 1970. These rates declined in the 1970s for both California and the United States. California's rates declined somewhat earlier than those for the country as a whole, probably due in part to the earlier and more widespread availability of abortion in California. Through the late 1970s and early 1980s, teenage birthrates in California and the United States were nearly identical. However:

- Beginning in the mid 1980s, teenage birthrates began to increase; the rise in California has been more dramatic than that for the nation as a whole; and

- By the early 1990s, California had diverged quite sharply from the national trend, with the gap between the two growing appreciably—from 5 percentage points in 1988 to 12 in 1991.
- It should be noted, however, that because recent information on the number of teenagers obtaining abortions in California is not available, it is unclear whether the rise in birthrates

can be attributed to an increase in the pregnancy rate or whether fewer women are choosing to have abortions.

Figure I-6

Source: Alan Guttmacher Institute, 1994b

Within California

Birth Rate Trends by Race/Ethnicity

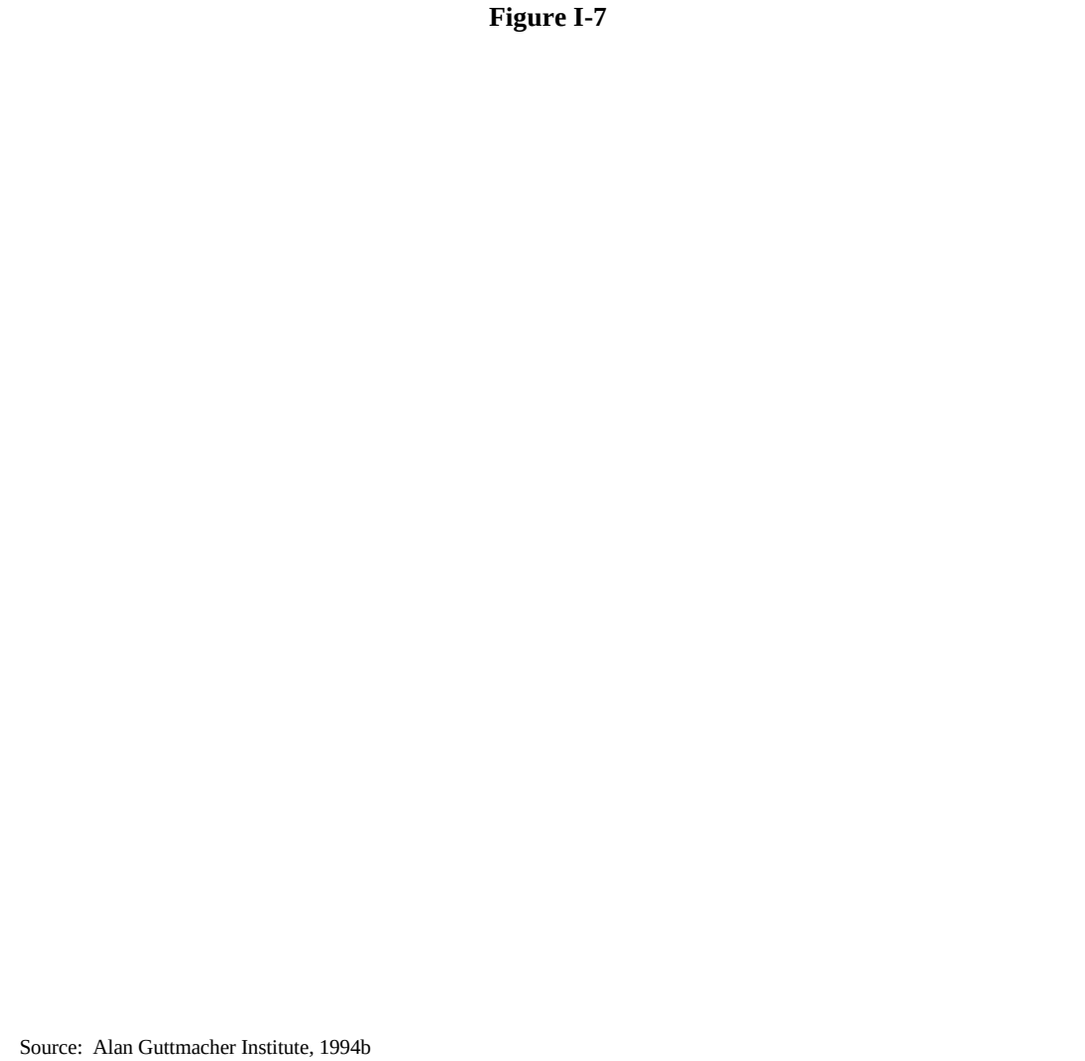
Between 1980 and 1992, the birth rate among teenagers in California increased by over one third—from 53 births per 1,000 women aged 15-19 to 71 births per 1,000 women aged 15-19. This increase is due in part to the changing ethnic composition of California's population and to significant increases in the teenage birth rate among Hispanics and blacks during the late 1980s and early 1990s. It is unknown whether this increase reflects rising pregnancy rates among teenagers, declining abortion rates or some combination of the two.

- The birth rate for Hispanic teenagers in California is about three times the rate for non-Hispanic white teenagers and rose dramatically between 1980 and 1992—from 91 to 119 births per 1,000 Hispanic women aged 15-19.

- The birth rate for black teenagers in California also rose significantly during the period—from 79 to 101 births per 1,000 black women aged 15-19.

- The birth rate for non-Hispanic white teenagers in California rose only marginally between 1980 and 1992—from 34 to 38 births per 1,000 white women aged 15-19.

Figure I-7



Source: Alan Guttmacher Institute, 1994b

While over one-quarter of the overall increase in California's teenage birth rate is due to population changes and the increase in the number of Hispanic teenagers giving birth, most of the growth is due to the actual rise in birthrates for different subpopulations.

- The combination of more Hispanic teenagers and higher birthrates among Hispanic teenagers has resulted in a dramatic change in the racial/ethnic distribution of teenage births during the period.
- In 1980, 40 percent of all teenage births in California were to Hispanics and 40 percent were to non-Hispanic whites. By 1992, the distribution of teenage births in California had changed so that nearly 60 percent of all births were to Hispanic teenagers and only 23 percent were to non-Hispanic white teenagers.

- Thus, although 46 percent of all teenage *women* in California were white and 34 percent were of Hispanic origin, only 27 percent of all teenage *births* were to white teenagers while 54 percent of births were to Hispanic teenagers in 1990. Only 6 percent of all teenage births were to Asian women, even though they represent nearly 12 percent of all teenage women.

Figure I-8

Source: Alan Guttmacher Institute, 1994b

Impact of Marriage on Teenage Birthrates by Race/Ethnicity

Within California, like the nation as a whole, variation in teenage birthrates according to the race or ethnicity of the teenager is a reflection of many different factors, including variation among these groups in poverty levels, the age at which teenagers give birth and variation in marriage levels among the groups.

- A much higher proportion of Hispanic teenagers are married than are either black or white teenagers. At ages 18 and 19, 17 percent of Hispanic young women are married or have been married, compared to 9 percent for whites and only 7 percent for blacks.

Figure I-9

Source: Alan Guttmacher Institute, 1994b

- Among Hispanics, more than either whites or blacks, a significant number of adolescent births among 15-17 year-olds and especially 18-19 year-olds are occurring within marriage.

Impact of Sexual Activity, Contraception and Abortion on Teenage Birthrates by Race/Ethnicity

While there are no state-wide estimates for these factors, regional survey data regarding sexual activity and limited information on Medi-Cal funded abortions may help to uncover patterns that may be significant for the state as a whole.

A longitudinal study of young women in Los Angeles County (Aneshensel et al. 1990) showed the following:

- Mexican-American adolescents born in Mexico are the least likely to be sexually active, the most likely to have been pregnant or given birth and the least likely to have had an abortion. Nearly three-quarters of all sexually active Mexico-born teenagers had experienced a pregnancy, reflecting very low levels of contraceptive use among this group.

- Mexican-American adolescents born in the United States are similar to non-Hispanic white teenagers in terms of sexual activity, although they are more likely to become pregnant and give birth than were sexually active non-Hispanic white teenagers.

State-wide data on the numbers of teenage deliveries and abortions paid for by Medi-Cal suggest that the recent rise in teenage births in California has not been accompanied by a rise in teenage abortions.

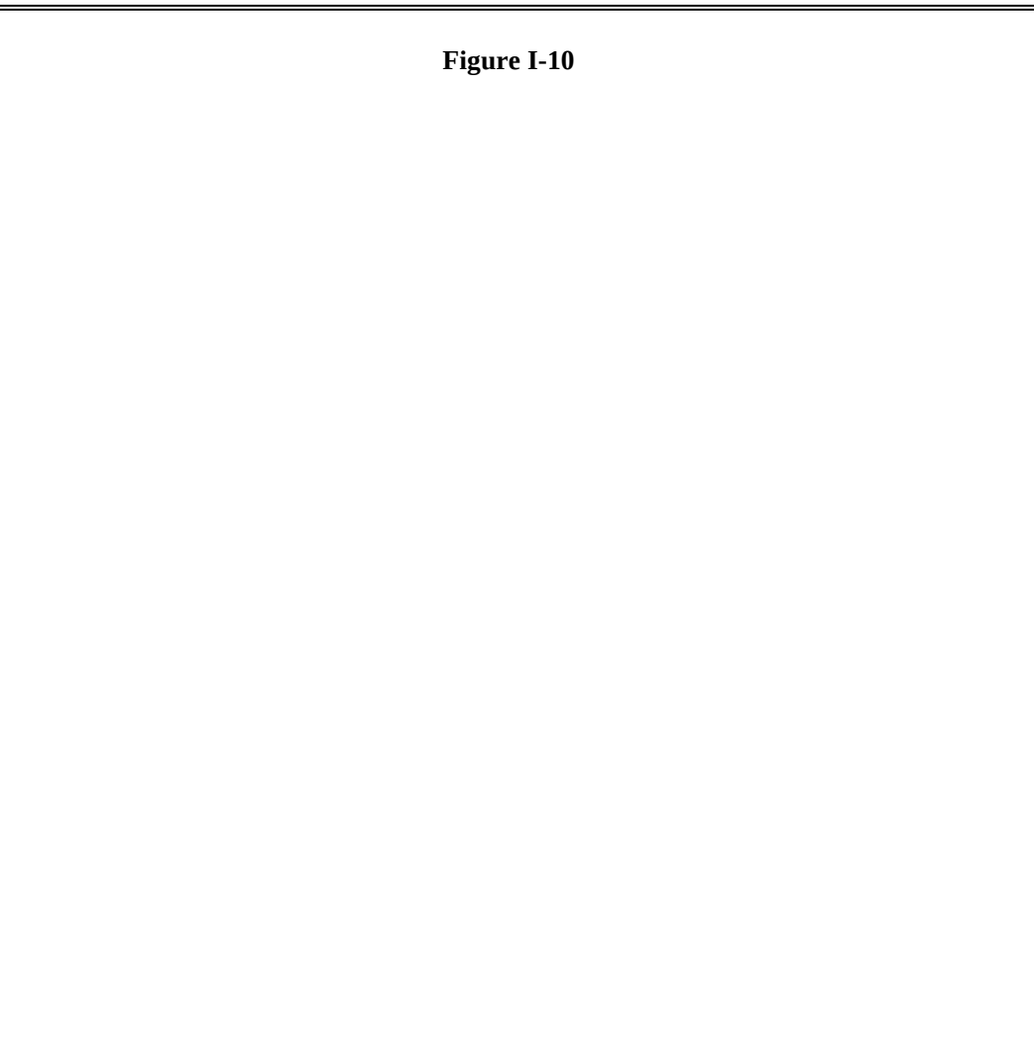
- In 1987 the number of deliveries and abortions to teenagers funded by Medi-Cal were nearly equal.

- However, between 1987 and 1992 the number of Medi-Cal funded teenage deliveries nearly doubled. In 1980, Medi-Cal paid for nearly 40 percent of all teenage deliveries; by 1992 its share had risen to over 50 percent.

- But, between 1987 and 1992 the number of teenage abortions funded by Medi-Cal has remained relatively constant. It is unknown what proportion of all teenage abortions these numbers represent.

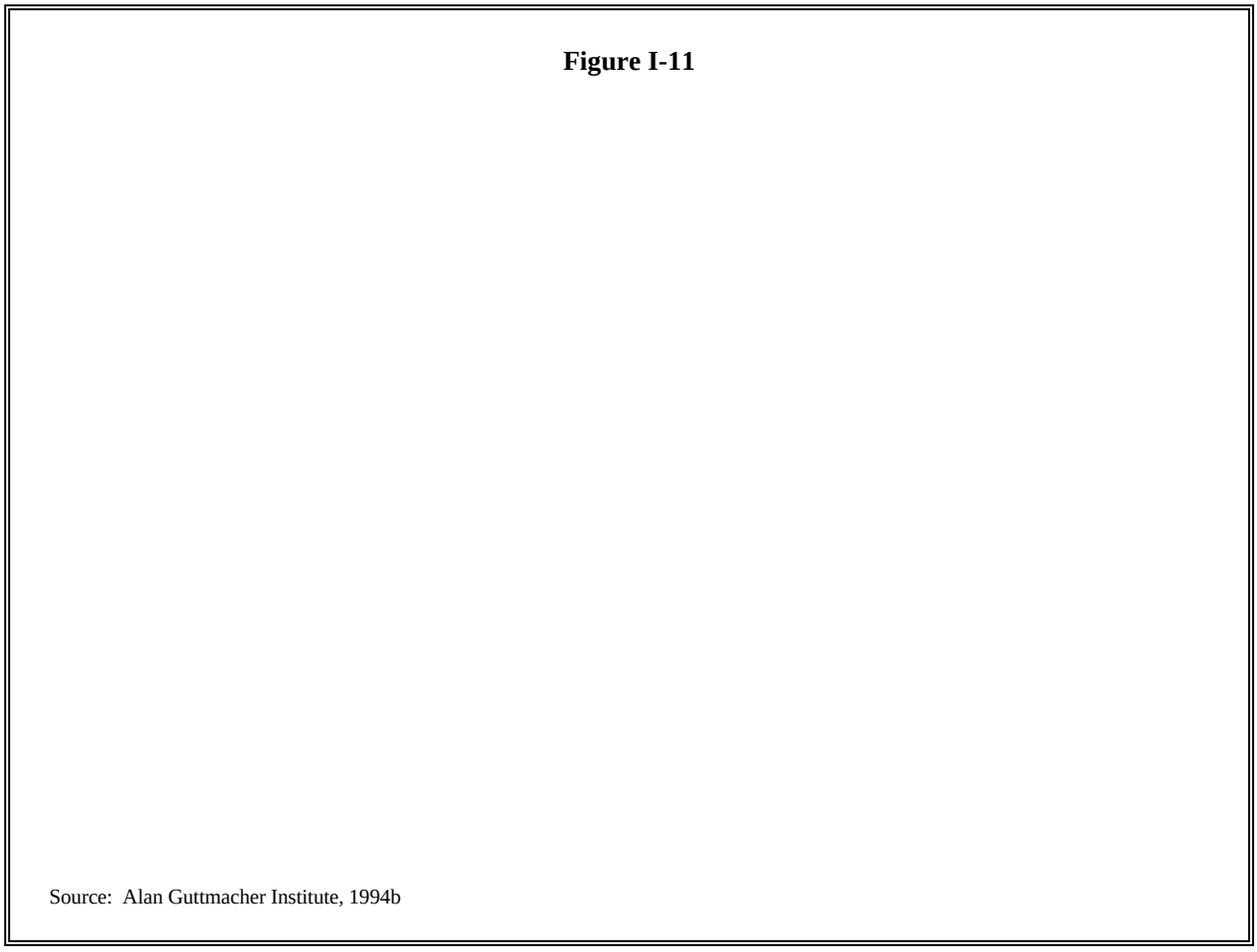
- For the state as a whole, Medi-Cal funded 37 percent of the 1992 estimated number of abortions to women of all ages.

Figure I-10



Source: Alan Guttmacher Institute, 1994b

Figure I-11



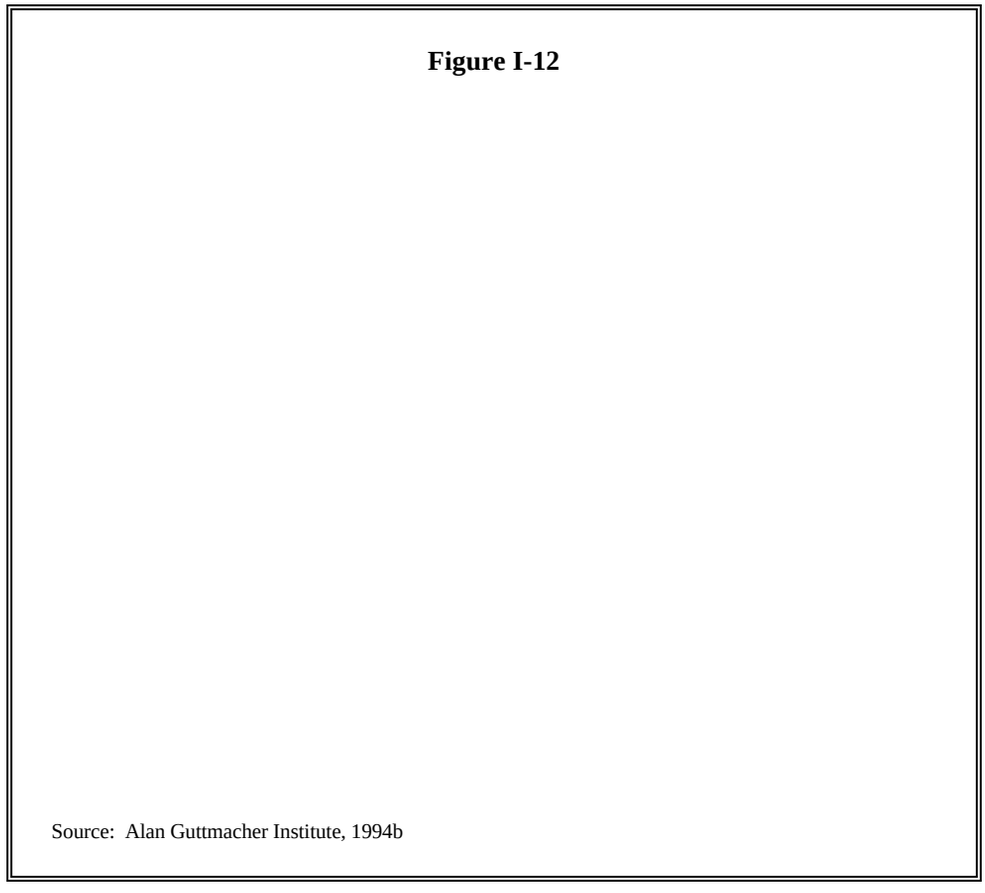
Source: Alan Guttmacher Institute, 1994b

Older Men and Teenage Births

Similar to what has been observed throughout the United States, most of the births to teenage women in California are not fathered by teenagers, but rather, by young adult men. Among all births to teenage women in California in 1990, 85 percent are classified according to the age of the father. Among these:

- Over 50 percent of the fathers were between the ages of 20 and 24,
- 17 percent were age 25 or older; and
- Only one-third of the births to teenage women were fathered by teenage men

Figure I-12



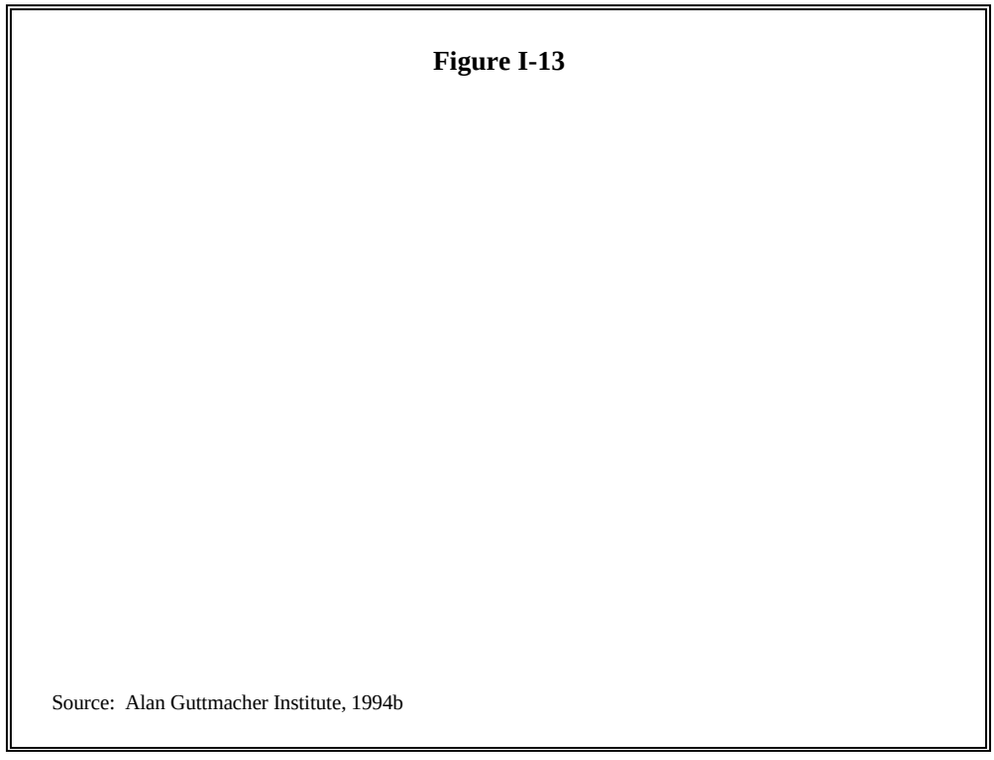
Source: Alan Guttmacher Institute, 1994b

Adolescent use of publicly-funded contraception services

In 1990, only 12 percent of all teenage women and 22 percent of the estimated sexually experienced women in California received services at publicly-funded clinics or funded by Medi-Cal. This is somewhat lower than the estimated percentage of teenagers receiving publicly-funded services nationally in 1987-88. It is not known how many teenagers may have received services from private physicians or used drug-store methods.

However, the number of teenagers receiving contraception services in California's public sector dropped by 20 percent during the late 1980s (from 158,045 in 1987 to 127,051 in 1990). During this same period, California's teenage female population fell by only one percent. It is likely that this decline was the result of overall cuts in public funding for contraceptive care that occurred in California throughout the decade.

Figure I-13



Source: Alan Guttmacher Institute, 1994b

Socioeconomic Trends and Characteristics

Changes in the Racial/Ethnic Composition of Youth Today

America is becoming more diverse racially and ethnically, as is California. However, in California this trend is much more pronounced and the population is becoming more diverse and less similar to the nation as a whole. Between 1980 and 1990:

- The proportion of Hispanic/Latino teenagers in California rose from 23 percent to 34 percent of all teenagers aged 15 to 19, compared with an increase from 8 percent to 11 percent for the U.S. as a whole;

- The proportion of African-American teenagers in California is lower than in the U.S. as a whole and this proportion has remained steady; and

- The proportion of Asian teenagers in California rose from 6 percent to 12 percent, compared with a rise of 2 percent to 4 percent for the rest of the country.

Furthermore, these major racial/ethnic groups are divided in important national and cultural subgroups. For example, among the 12 percent of California's teenagers who are of Asian origin, there are, in order of overall size, subpopulations of Filipino, Chinese, Vietnamese, Korean, Japanese, and others.

Figure I-14

Source: Alan Guttmacher Institute, 1994b

Recognizing Cultural Diversity in California

In order to understand the context within which adolescent sexual and reproductive behavior occurs, it is useful to look more closely at the increasing level of cultural diversity in California versus the U.S. These differences can be illustrated by the growing proportion of residents who were born in other countries and who speak languages other than English.

- In 1990, nearly one-quarter of the state's residents were born in another country, compared with only 8 percent of the residents nationwide;

- One-third of the state's residents speak a language other than English at home, compared with 14 percent of the residents nationwide; and

- Fifteen percent of children (aged 5 - 17) in the state do not speak English well, compared with 5 percent of the children nationwide.

Thus, a high proportion of adolescents in California are growing up in immigrant families, are speaking their native languages at home, and are faced with the task of resolving the cultural gap between traditional parental values and the popular values espoused on the streets and on television.

Figure I-15

Source: Alan Guttmacher Institute, 1994b

Variation in Poverty and Family Structure by Race/Ethnicity

Poverty and family structure are important contextual factors that affect teenage reproductive behavior and also vary significantly among the different racial and ethnic groups. Adolescents who grow up in poverty are more likely than more affluent teenagers to become pregnant or give birth.

- Approximately on out of every 7 families lives at or below the federal poverty level (In 1990, the federal poverty level for a family of four was $13,359; in 1980 it was $8,414) in the U.S. as a whole and in California;

- The proportion of families in poverty did not change significantly between 1980 and 1990.

- Within racial/ethnic groups, there are some striking differences. As compared with non-Hispanic White families, Hispanic, Black and Asian families are two to three times more likely to live in poverty.

- In California, lower proportions of Hispanic and Black families live in poverty than in the nation as a whole.

- The proportion of California's Asian families living in poverty nearly doubled between 1980 and 1990 and is approaching the national proportion of poor Asian families.

With regards to female-headed households:

- Nationwide, approximately one in five families is headed by a single female;
- Nearly half of all Black families are headed by a single female;

- Over one third of these families live in poverty, with approximately half of Hispanic and Black female-headed families living at or below poverty.

The pattern observed in California is similar, although the proportion of female-headed households that are poor is lower than in the U.S. as a whole.

Figure I-16

Source: Alan Guttmacher Institute, 1994b

Figure I-17

Source: Alan Guttmacher Institute, 1994b

Figure I-18

Source: Alan Guttmacher Institute, 1994b

Socioeconomic Traits by County in California

Racial and Ethnic Diversity and Economic Differences Vary Across and Within Communities

County-specific data on a number of demographic indicators and birth levels are provided in Figures I-20 to I-23. The following are some of the demographic highlights of California's adolescents:

- The highest concentrations of teenage women in the state are in southern and central California. Twelve counties in these areas are each home to more than 25, 000 teenage women; nearly one-third of California's female youth reside in Los Angeles County alone (414,000) and over 100,000 teenage women each in Orange and San Diego counties. In comparison, only a small proportion of the state's teenage women reside in eastern and northern California, where 17 counties each have fewer than 2, 000 teenage women.

- High concentrations of female youth living in families at or below the federal poverty level are found within California's central valley (roughly, California's interior counties south of Sacramento and north of Kern county) and within a few scattered northern and southern California counties. Within these counties more than One-quarter of all adolescent women live in poverty. Relatively low concentrations of poor teenagers are found in counties immediately surrounding San Francisco, counties along California's central eastern border and Santa Barbara County.

- High concentrations of Hispanic teenage women live within the counties of southern and central California. Within fifteen of these counties, one-third or more of the teenage women are of Hispanic origin—within two counties (Imperial and San Benito counties) more than 50 percent of all adolescent women are Hispanic. In contrast, relatively low percentages of Hispanic youth live in California's northern-most counties.

- The population of African-American teenage women is scattered among a few of California's counties. Most counties have very few African Americans. The percentage of adolescent women who are Black exceeds 10 percent in only five counties in the Los Angeles and San Francisco/Sacramento metropolitan areas. This percentage reaches 22 percent in Alameda County.

- Among California's counties, there is little variation in the proportion of teenage women aged 15-19 who are estimated to be sexually experienced. For most counties, the estimated proportion is sexually experienced teenage women falls between 50 percent and 60 percent.

Within California: Birthrates by County

The single largest concentration of teenage births in California is in Los Angeles County, consistent with the fact that over 30 percent of the states' teenage women reside in that county. Other counties in south and central California also have relatively high concentrations of teenage births, reflecting both the overall distribution of teenage women throughout the state and patterns of poverty in the state.

- Teenagers in many central valley counties have very high overall birthrates, exceeding 100 births per 1,000 women aged 15-19. Many of the surrounding counties in southern and central California also have relatively high teenage birthrates, 75 or more births per 1,000 women aged 15-19.

- Counties with high birthrates generally also have relatively high populations of poor youth, as well as high proportions of Hispanic/Latina or African-American youth—groups whose birthrates are characteristically high throughout the state.

- However, some variation among counties is also due to differences in the birthrates of White teenagers by county. In several central California counties, the birth rate for Whites is nearly double the statewide rate for Whites, varying between 75 and 99 births per 1, 000 teenagers.

Figure I-19

Source: Alan Guttmacher Institute, 1994b

Comparison Between High and Low Birthrate Counties.

The variation in teenage birthrates among counties in California can be illustrated by comparing those counties with the highest and lowest overall teenage birthrates. Figure I-22 reflects a comparison of the four counties with the highest birthrates (Tulare, Fresno, Merced, and Kern) and the four counties with the lowest birthrates (San Francisco, Contra Costa, Sonoma, and San Mateo). It also presents a comparison of these counties with the state's four most populated counties (Los Angeles, San Bernadino, Orange, and San Diego).

- The counties of Tulare, Fresno, Merced, Kern, Los Angeles, and San Bernadino account for 50 percent of all teenage births in California, while only 42 percent of the state's teenagers reside in these counties;

- 15 percent of teenage births in the state occur in the remaining 8 central and southern California counties with high teenage birthrates (Imperial, Kings, Madera, Monterey, Riverside, Sacramento, San Joaquin, and Stanislaus);

- 55 percent of the state's teenage women reside in these 14 counties (Fresno, Imperial, Kern, Kings, Los Angeles, Madera, Merced, Monterey, Riverside, Sacramento, San Bernadino, San Joaquin, Stanislaus and Tulare) and account for 65 percent of all teenage births.

- In contrast with the high teenage birth rate counties, the low teenage birth rate counties, with 23 percent of the state's teenager population, accounted for only 19 percent of the teenage births statewide.

Figure I-20

Source: Alan Guttmacher Institute, 1994b

The striking differences in overall teenage birthrates between these two groups of counties is accompanied by significant differences in the proportion of the population who are poor and who are Hispanic.

- In the high teenage birth rate counties in the central valley, approximately one-quarter or more of teenage women live at or below the federal poverty level. In contrast, only 10 percent to 20 percent of the teenage women in the low teenage birth rate counties live in poverty.

- One-third or more of all teenage women living in the high birth rate counties are Hispanic. In contrast, only 12 percent to 30 percent of the teenage women in the low birth rate counties are Hispanic.

- Black teenagers reside in both high and low teen birth rate counties in relatively small numbers, with the exceptions of a few counties in which 10 percent to 15 percent of the teenagers are Black.

Figure I-21

Source: Alan Guttmacher Institute, 1994b

Finally, birthrates by race and ethnic origin also differ considerably between the two groups of counties:

- Among Hispanics and the few Blacks who live in the high birth rate central valley counties, teenage birthrates are exceptionally high, averaging over 130 births per 1,000 women aged 15 - 19 of each group;

- Although White teenagers living in the central valley have lower teen age birthrates than Hispanics or Blacks, their rates are still very high and are 3 to 4 times higher than the birthrates of White teenagers living in the San Francisco bay area; and

- Hispanics living in the low teenage birth rate counties have birthrates that are approximately a third lower than the teenage birthrates for Hispanics living in high birth rate counties, but the rates in these counties are similar to the rates for Hispanics in all four of the largest counties.

Figure I-22

Source: Alan Guttmacher Institute, 1994b

Figure I-23

Figure I-24

Figure I-25

CHAPTER II: DIMENSIONS OF TEENAGE PREGNANCY

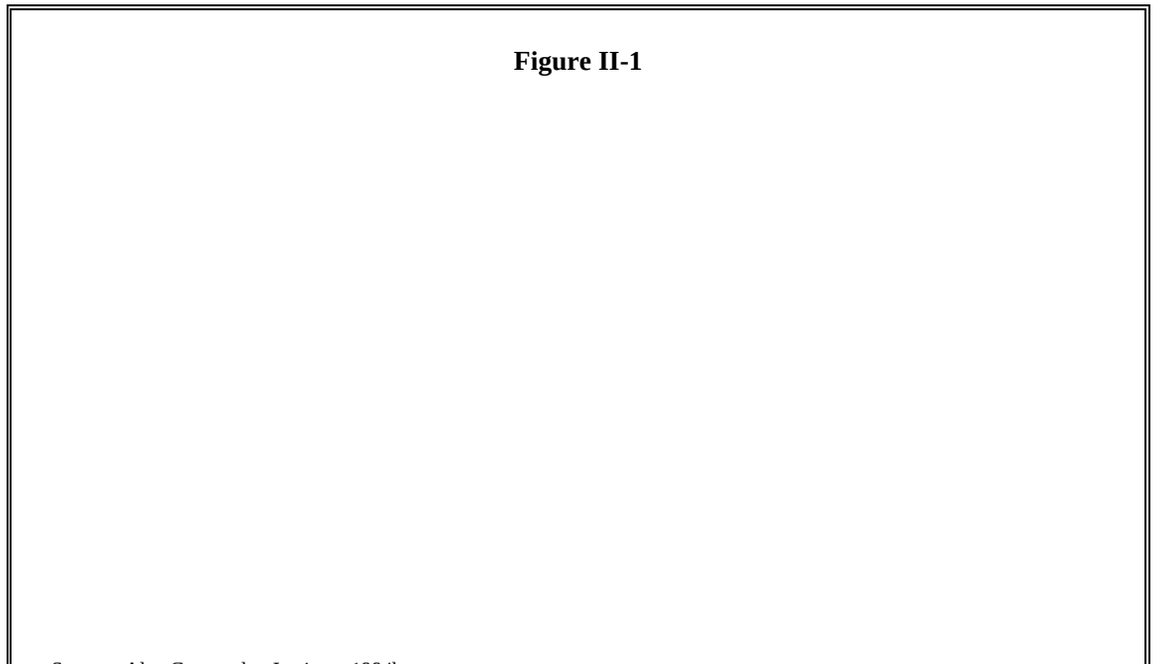
Several studies have been undertaken to identify those factors associated with teenage pregnancy (AGI 1994b; Elliott and Morse 1989; Biemesderfer and Bustos 1989; Butler 1992; Zabin and Hayward 1993). While these factors do not cause teen pregnancy, the studies confirm that these factors are correlated with teen pregnancy. This information is very useful to policymakers and others who are concerned with the teen pregnancy issue in understanding the populations who would benefit most from intervention.

Socioeconomic Factors

The context of adolescents' lives has changed dramatically in the last decade, influencing adolescent sexual and reproductive behavior, and influencing perceptions of the teenage pregnancy problem." Poverty, violence and changing family structures have brought instability into the lives of many adolescents. Such teenagers, faced with insurmountable odds and few opportunities, are at high risk for becoming pregnant or a teenage parent. When compared with all teenagers, those who become pregnant are more likely to have come from poor or low-income families (below 200 percent of the federal poverty level); those who give birth are even more likely to have come from disadvantaged backgrounds.

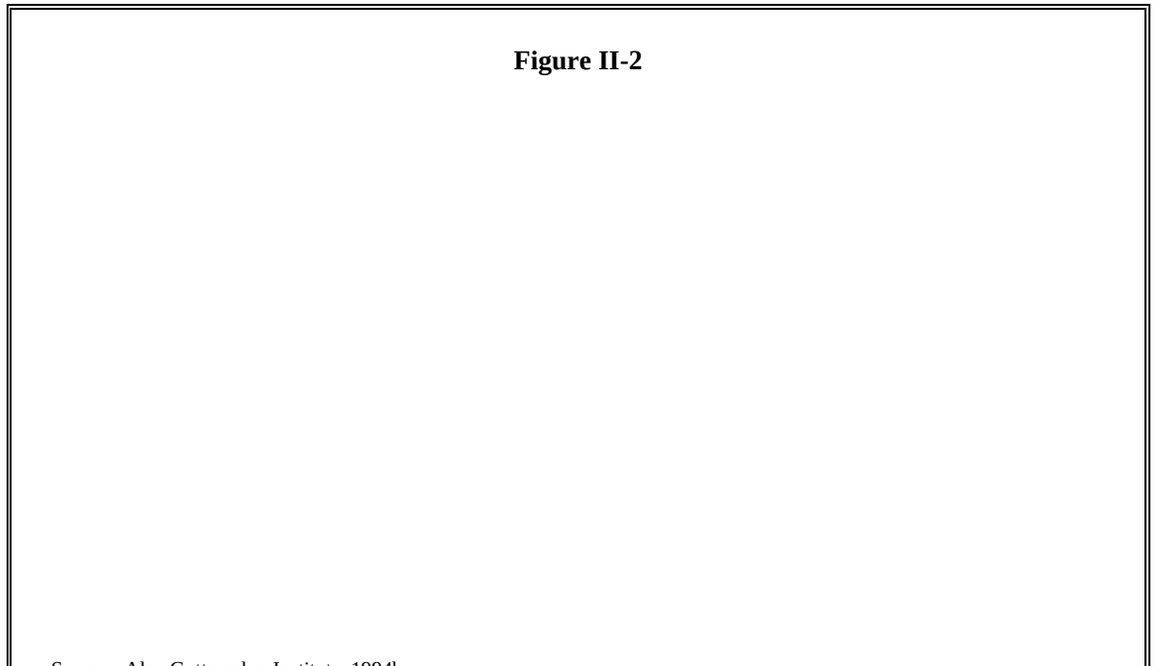
- Poorer teenagers are slightly more likely to be sexually experienced than teenagers from more advantaged families, but they are much more likely to become pregnant.
- Teenagers from families that are better off financially are more likely than those from poorer homes to terminate an unplanned pregnancy—nearly three-quarters of higher income adolescents who become pregnant have abortions, compared with fewer than half of those from poor or low income families. (See Figure II-1.)
- Pregnant adolescents whose parents have more education are more likely than those with less-educated parents to end their pregnancies in abortion.
- Individual orientation towards the future makes a difference. Pregnant adolescents with strong aspirations for the future are relatively likely to choose abortion. (See Figure II-2.)

Figure II-1



Source: Alan Guttmacher Institute, 1994b

Figure II-2



Source: Alan Guttmacher Institute, 1994b

Race/Ethnicity Factors

There are significant differences in teenage pregnancy, abortion and birthrates according to the race or ethnicity of the teenager, the age of the teenager and even the age of the male partner.

- In 1988, the pregnancy rate for Hispanic teenagers was more than one and a half times the rate for white teenagers, while the rate for black teenagers was over twice the white rate.

- Differences in birthrates are even more striking: Hispanic and black teenagers have birthrates that are two to three times higher than similar rates for white teenagers.

- Abortion rates are relatively similar for Hispanics and whites, but are significantly higher for blacks.

- The proportion of pregnancies that are resolved with either a birth or an abortion also varies according to the race/ethnicity of the teenager. White teenagers are more likely to resolve an adolescent pregnancy with an abortion than with a birth. In comparison, approximately 60 percent of black teenagers and two-thirds of Hispanic teenagers choose birth over abortion.

- The younger the age of the male partner, the greater likelihood that the pregnancy will be terminated—61 percent of pregnancies to women under 18 when the partner is also under 18, compared to 33 percent when the partner is twenty years of age or older. And, for a sizable minority of young women who become mothers, the father of the baby is in fact, considerably older—by six years or more.

Environmental Factors

Adolescent females who are most likely to become sexually active and not use contraceptives are more likely to:

- Live in a neighborhood that has high infant mortality rates, high illicit drug use, and high rates of violent crimes and violent deaths;
- Be poor;
- Live in a single-parent household;
- Be the child of a teenage mother; and
- Have parents with lower educational attainment and lower occupational status.

There are six factors the have been identified as most significantly correlated with teen pregnancy. Adolescent girls for whom all these factors apply are eight times more likely to become pregnant than adolescent girls who have none of them (Zabin and Hayward 1993):

- Lower socioeconomic status;
- Residence in a ghetto neighborhood;
- A non intact family;
- Five or more siblings;
- Sisters who have had a teenage birth; and
- Lax parental control of dating.

Figure II-3

Factors Associated with Teen Pregnancy

Factor Level	Sexually Active	Use Contraceptives	Does Not Abort
Individual Characteristics:	• Independence valued and expected • No sex education • Lower school grade average • Lower personal and educational aspirations • Lower religiousness • Delinquency, and abuse of alcohol, marijuana, illicit drugs • Achievement less expected or valued • Older, unless Black • Traditional view of sex roles	• Pregnancy risk and contraceptive safety believed in • Sex education class • Access to confidential family planning • Older age at first intercourse • In school or working • High sense of individual control • high educational aspirations • Soon after initiation of sexual activity if Black • Non-traditional view of female role	• Greater religiousness • Conservative regarding abortion • Poorer school performance • Interest in baby-sitting desire for pregnancy • Poorly developed future perspective • Lower confidence • lower educational and occupational aspirations • Older teen • Traditional view of sex roles
Family Factors:	• One-parent household • Sister/mother were teenage mothers • Less supervision of dating behavior • Views are closer to peers than parents • Lower parental education	• Working mother • Better relationship with mother • Knowledge of sibling and parent birth control experience • Smaller families • Higher occupational status of father	• Influential partner • Hispanic • Sibling role model • One-parent families • Larger families
Community (Environmental) Factors:	• Metropolitan residence	• Higher income	• High school dropout rates high in community

Source: Foster, 1986

Psychological Factors

Researchers have identified several significant behaviors and beliefs as most common among teens who chose to engage in early sexual activity and who do not use contraceptives effectively (Zabin and Hayward 1993; Westoff 1988; Trussell 1988; Butler 1992; Elliott and Morse 1989). These teens:

- Engage in various "premature adult behaviors" such as smoking and drinking;
- Engage in risky behaviors, such as driving without a seat belt;
- If a young or middle adolescent, participate in delinquent behavior;
- If an older adolescent, use illicit drugs;
- Do not believe in or comprehend probabilities or risks ("It can't happen to me");
- Are alienated from the middle class values of hard work, education and thrift; and
- Do not believe they can or will experience educational or economic success.

Sexual Abuse

It is estimated that 65 percent of all teen mothers have been victims of sexual abuse, although it is usually not the abuser who has caused the pregnancy. There appears to be a strong correlation between the abuse and the pregnancy. Abused teenagers have earlier and higher rates of sexual activity than non-abused teenagers. They are more likely to have multiple sexual partners and engage in a wider range of sexual behaviors. Thus, being sexually abused in childhood may put an adolescent at risk for behaviors that lead to a nonmarital birth (Gershenson et al. 1989, Musick 1993).

The above chart summarizes the research on environmental and psychological factors. (Figure II-3)

State by State Comparison

States in which rates of teenage childbearing are high are more likely to have the following characteristics than states with lower rates of teenage births:

- Lower per capita expenditures on public welfare and local schools;
- Higher poverty rates;
- Higher school dropout rates; and
- Higher unemployment rates.

Eighty percent of the variability in state teenage birthrates can be attributed to the above factors (Zimmerman 1988).

A comparison of factors by state reported that states with higher teen birthrates had (Singh 1986):

- Lower AFDC payments;
- Higher crime rates;
- Higher suicide rates;
- Higher sales of sexually explicit magazines;
- Lower voting rates;
- Higher rates of business failures;
- Higher divorce rates; and
- More new welfare cases.

White girls who become pregnant are more likely than adolescents from other ethnic groups to:

- Have a family history of mental illness;
- Have lost a parent through death; or
- Be a runaway.

These factors suggest that the pregnancy may often be a solution to psychological problems (Coddington 1979; Felice et al. 1987).

International Comparisons

The United States has one of the highest teenage pregnancy, abortion and child birthrates among the industrialized countries (see Figure II-4) (AGI 1994a). Even when excluding the birthrates of Black teens in the U.S., which are considerably higher than the birthrates of White teens, the birthrates for the remaining teenagers in the U.S. are higher than for most other economically developed countries. Rates for younger teens fall between those of Hungary and Romania (U.C. Data 1994).

In a 37-nation comparative study, the following factors were found to be correlated with high teenage birthrates:

- Higher levels of religiosity;
- Less equitable distribution of income;
- Less openness about sex (e.g., media presentation of nudity, nudity on public beaches, sexually explicit literature, media advertising of condoms);
- Higher proportion of labor force in agriculture;
- Higher levels of maternity leaves and benefits;
- Government policies to increase fertility (e.g., restrictions on abortions and access to contraception); and
- Lower levels of teaching about contraceptives.

Most of the factors that are correlated with high rates of teenage pregnancy are present in the U.S., the exceptions being that a small agricultural labor force and less generous maternity benefits. Many states have restrictions on access to contraception and abortions resources for teenagers. Countries with lower teen pregnancy rates are more likely to supply contraceptives at very low cost to teenagers and to make them easily accessible (Jones et al. 1985).

Figure II-4

Source: Alan Guttmacher Institute, 1994a

CHAPTER III. PROGRAMS TO PREVENT TEENAGE PREGNANCY

Since teenage pregnancy was identified as an issue in the seventies, when the so-called Baby Boom generation became teenagers and the numbers and proportions of teenage parenthood swelled, various programs have been devised, implemented and evaluated. Following is a list of the major approaches, with examples and discussion of the features and effectiveness of each .

Prevention Models

Sex Education

Sex education was the first approach implemented to try to reduce teenage pregnancy. Information on reproduction, risk factors, and pregnancy prevention was considered inadequate among the adolescent population. It was hoped that by providing this information, the teen birth rate would decline. Although mandated by many states, it was difficult to implement in many local school districts. This difficulty stems from religious and cultural objections to the content of the courses, especially over the provision of birth control information. It was feared by many opponents that these classes would increase sexual activity by increasing teenagers' awareness of sexuality. The preponderance of evidence in evaluating these programs is that this did not occur. Sexual activity did not increase, but unfortunately it usually did not decrease, either (Marsiglio and Mott 1986; Dawson 1986; Kirby 1994).

Neither pregnancy nor birth rate declined as a direct result of sex education. In many cases, due to local opposition, the curriculum was delivered without references to contraception. In others, while contraception was covered, it was done in an abstract manner, without any detailed information. In addition, most evaluations of such programs conclude that while the information taught was usually learned by students, it was not applied by them personally to their own lives. These findings are consistent with the lack of success found in other knowledge-based instruction strategies, such as smoking, drinking and drug use (Howard and McCabe 1990; Kirby et al. 1991).

Family Life Education Courses

Family life education courses comprised the next phase of pregnancy prevention programs. It was observed that students weren't applying the knowledge they had obtained about the risks associated with sexual activity, due to peer pressure or failing to make responsible decisions and sticking to them. Family life courses expanded the established curriculum to include instruction on decision making, problem-solving, peer pressure resistance, and assertiveness.

Students are encouraged to discover their own values and then to make decisions about sexual behavior on that basis. Classes are supposed to be value-free, in the sense that the curriculum does not attempt to teach specific values. Rather, the course is intended to help the students discover their own values. Several programs have demonstrated some success. Researchers found that, by increasing knowledge, teens delay the initiation of sexual activity. However, most family life education courses have not achieved significant changes in the sexual values or regular use of contraceptives by sexually active students (Kirby et al. 1991).

Abstinence Programs

Abstinence programs were the next phase of pregnancy prevention policies that met with some significant success. Educational theory suggests that pre-pubescent and early adolescent students are developmentally in the concrete stage of thinking, not quite ready for probability statistics and abstract thinking. Therefore, these programs used a health model often called "social inoculation." Assuming abstinence as a given value, these programs provide the students with small doses of peer pressure, then allow them to practice fighting it off through role-playing and other concrete exercises. Peer role models (slightly older teenagers) often are involved in presentations and discussions. One of these programs, Postponing Sexual Involvement (PSI), is the basis for California's ENABL (Education Now And Babies Later) program. ENABL is currently under evaluation (Howard and McCabe 1990).

Life Options Programs

Life options programs provide teenagers with viable alternatives to early pregnancy and low income work. Because so many teenagers who become pregnant do not have high aspirations, these programs attempt to instill and support higher goals. The life options programs also usually include many of the traditional sex education topics, as well as the expanded instruction in decision-making and assertiveness-training. By stimulating aspirations, they hope to replicate the type of motivation that seems to be responsible for both abstinence and careful contraception practices among adolescents who avoid teenage pregnancy. The Teen Outreach Program, a life option program, has demonstrated extremely high rates of success (Allen and Hoggson 1990; Hayes 1987). It is discussed in detail below.

School- and Community-Linked Health Clinics

Health clinics linked to schools or community service providers is another type of program implemented to reduce teenage pregnancies. The clinics provided students with direct confidential access to contraceptive information, devices, and prescriptions. Where utilized, these clinics had some effect in reducing teen birthrates. It is estimated that for every one dollar spent on family planning services, $4.40 is saved in avoided services (Forrest and Singh 1990). Other researchers estimate far higher ratios of cost-savings, some as high as $89.00 per dollar (LAO 1988).

School based-clinics give greater access to students, but there are more restrictions on the delivery of contraceptives in these settings. School-linked clinics, with information and classes at school and health services at an off-site location, have been shown to be effective. Community-based clinics had the advantage of being open when school was closed and have been shown to have some positive results (Hofferth 1991).

The clinic approach to teen pregnancy prevention faces many adverse circumstances in fulfilling its mission. Public opinion is very divided on the appropriateness of providing confidential access to contraceptives to teens without parental knowledge or consent. Further, there is often opposition to making these services available at or very near schools.

School-to-Work and Transition Educational Programs

Educational programs that link school with the world of work have also had positive results on school dropout prevention and increased educational goals and career aspirations. Much of the literature on teenage pregnancy finds strong links between teen pregnancy and poor school experiences, such as poor grades, low skills and suspensions or grade failures. Higher student-teacher ratios are associated with increased probability of criminal activity among male students and the increased likelihood of dropping out of school among female students. Smaller class sizes reduce both undesirable behaviors (Hill and O'Neil 1993).

Some of these programs provide remedial instruction, as well as supported work experiences. Over three-fourths of the current jobs in this country do not require a college degree. They do require specialized knowledge or skills (Burke, McKenna and McKeen 1991). Educational programs that appear to hold promise for the future are those that connect the student with the world of work. This is done by integrating paid or unpaid work experiences and academic knowledge through service learning, internships, or other work simulations or jobs. Schools working closely with local industries can train students for existing jobs and coordinate job search activities. School-work opportunities may keep high risk students in school and motivated to achieve (LAO 1994).

School-to-work programs ideally have three components:

- One-on-one counseling for school and career planning;
- Work training and experience; and
- Connections between school and work, including job search assistance.

The work experience can be paid or unpaid. Learning can occur at school or on the job site, but should integrate both. Students' interests and abilities should be important elements in work and school plans (LAO 1994).

Pre-Adolescent Interventions

The literature suggests that the factors in families that are often associated with teenage pregnancy are also associated with school dropout and juvenile criminal behavior (Foster 1986). Interventions at earlier ages for those children and families by programs focusing on mental health, family functioning, school dropout and delinquency have potential benefits for also reducing the incidence of teenage pregnancy. Drug prevention programs are also included in this group: the risk of premarital teen pregnancy is almost four times as high for those teens who have used illicit drugs as for those with no history of prior substance abuse (Mensch and Kandel 1992; Elliott and Morse 1989). Helping families escape substance abuse, parenting skills classes and financial management instruction, and employment related assistance, are all programs that could reduce teenage pregnancy.

California's Healthy State Program and Primary Intervention Program are current examples of such integrated programs and may result in reduced teen pregnancies. Fresno's K-Six Program, a program that provides case management to children at risk of school dropout is also preventing teen pregnancies. Families Together with Schools, a program utilizing the collaboration of school, mental health agencies, drug abuse agencies and parents, may also have significant continuing effects on

children as they reach adolescence. Programs such as these should be evaluated for the long-term effects they may have on teenage pregnancy.

Employment Training Programs for Males

Programs to increase employment among potential fathers have also been shown to have some promise. Poverty and unemployment are precursors of teenage pregnancy and childbearing. In one demonstration program, employment opportunities were dramatically increased in four communities, along with documented significant reductions and delays in teenage parenting, without any other interventions being applied (Duncan and Hoffman 1990).

Multi-Media Programs

Multi-media campaigns could be a useful approach to preventing teenage pregnancy. They have been used in various locations with some success, though usually unquantifiable. The media both reflects and shapes attitudes. It can also inform. In European countries where contraceptive advertising is allowed on television and radio, teenagers are more aware of the methods of contraception. Teen pregnancy and abortion rates are also lower in these countries (Hayes 1987). A model of such a program is the Coalition For Our Children campaign in the state of Maryland, described below.

What Works and Why: Some Models

Reducing the Risk Program

"Reducing the Risk" (RTR) is a “social inoculation” program that utilizes an experiential curriculum to teach students how to avoid unprotected sex. The theory is that confronting unwanted sexual situations through role playing will the students to learn, witness and practice methods of resistance to peer and date pressures. The explicitly stated norms are to avoid unprotected sex through abstinence or through effective contraceptive practices. Role playing, rather than books and lectures, is the mode of instruction, along with other practical activities, including encouraging discussion of various issues with parents.

Reducing the Risk has been successful in delaying sexual initiation. There was a 24% reduction in initiation of sexual activity for RTR students overall and an even higher rate of reduction for Hispanic students (36%). Somewhat lower rates of success were reported for high risk students and females. The RTR students who were sexually inexperienced at the beginning of the program and who became active during the 18 month follow-up period had improved rates of avoiding unprotected sex. Their rates of unprotected sex were 40% to 44% lower than that of the control group of students from the same schools who had a traditional sex education course (Kirby et al. 1991; Kirby 1992).

The program also increased communication between teens and their parents regarding birth control and abortion, and was particularly effective in this regard with females and all Hispanic students. This program, like Postponing Sexual Involvement, was most effective with inexperienced youth (Kirby et al. 1991; Kirby 1992).

Campaign For Our Children, The Maryland Approach

Maryland was one of only two states in the country to experience a decrease in the birth rate of single teens in 1994 (Annie E. Casey Foundation 1994). This is the result of a long-term, comprehensive and intensive effort. In 1980, Maryland began requiring all junior and senior high schools to teach classes on human sexual development, interpersonal relationships, responsible personal behavior, and strong family ties. In 1988, the state instituted a comprehensive program designed to prevent both early sexual activity and repeat pregnancies through youth clinics based at schools.

Community-based programs (with private and public funding) target middle school boys and girls. Sex education classes for younger students focus on abstinence, while drop-in clinics in teen-friendly settings provide counseling and contraceptives to older teens (National Conference of State Legislature, 1989). A large scale public/private partnership, Campaign For Our Children (CFOC), supports a mass media campaign that reinforces the messages of abstinence and responsibility. CFOC uses radio, television, billboards, bus placards and posters in an effort to change the cultural norms and behavior of the state's youthful population. CFOC is using the media to promote positive values not just values that promote sexual activity and other risk-taking behavior (Mayden 1994).

Community organizations work together within the state, bringing youth service agencies, the private sector, parents, churches and students into energetic coalitions. The Departments of Health, Social Services, Juvenile Services, and Education, as well as employment and training centers, are actively involved in the statewide effort. While it is difficult to measure the effects of a broad campaign, 75% of middle school students reported that they had talked to their parents about sex and family life topics as a result of the media campaign. The statewide results of declining birthrates (and declining abortion rates in Baltimore and other areas) suggest that the combined efforts are working (Annie E. Casey Foundation 1994; Mayden 1994).

California Anti-Smoking Campaign

A smoking cessation campaign in California in 1990-1991 has had a measurable impact on attitudes toward external tobacco smoke and towards the tobacco industry. Over half of adults and more than two thirds of teens recalled seeing the campaign (California Department of Health Services, 1994). More people who recalled the anti-tobacco campaign had negative attitudes towards tobacco smoking, believed smoking was harmful, had asked someone to quit, had tried and/or succeeded to quit, or had established their home as a tobacco free area than those who did not recall the campaign. Since the program began, smoking has declined by 30% in the state, compared to a 10% decline in the rest of the country. Teenage smoking is no longer growing as fast in California as it is in most other states (Hilts 1994). This program provides a supporting analogy to Maryland's media campaign.

School-Linked Health Clinic: The Johns Hopkins clinic

The pregnancy prevention program connected with Johns Hopkins University consists of two clinics located near school sites, with staff who spend the morning at the schools and the afternoons at the clinics. The schools serve impoverished inner city neighborhoods with Black populations; one is a middle school, the other a high school. Extremely high teen pregnancy rates exist in both of these schools. The program staff consist of a social worker, a medical professional, and a nurse practitioner or nurse midwife.

Some key features of the program are small group discussions, accessibility of medical care at the clinic, and staff supportive. At the school site, the program offered at least one classroom presentation each semester to each student and small group or individual consultation. At the clinic, contraceptive services are offered by clinicians, as well as informal discussions and small group educational sessions guided by a health educator. The goals of the program include reducing pregnancy and childbearing in the target population by delaying the timing of coital onset and increasing effective use of contraception (Zabin and Hayward 1993).

High levels of sexual initiation were evident at both intermediate and senior high schools. Sexual activity was reported by 47% of seventh and eighth grade adolescent girls, over 79% of senior high adolescent girls, and 92% of males in both schools. The three-year program was able to demonstrate significant improvement. Initiation of first sexuality was delayed by a median of 7 months. In contrast to the continuing increase in sexual initiation that was occurring in the surrounding neighborhoods in Baltimore at that time, this was a significant accomplishment. Contraceptive protection was increased to a rate of more than 80%, compared to 51-56% effective use of contraceptives in the control schools. Pregnancy rates increased 58% citywide during the study period. However, pregnancy rates among those adolescent girls exposed to the program for the full period declined 31.5% (Zabin and Hayward 1993).

This program was highly successful in improving rates and methods of contraception. It also reduced the frequency of sexual activity, even among those already active, and delayed onset of sexual activity among the inexperienced. The effects were particularly strong among both male and female younger students (Zabin and Hayward 1993).

Indirect Approaches

The following models are indirect approaches to preventing teenage pregnancy. Instead of trying to influence individuals to change their sexual behavior, these models focus on the underlying problems that are indicated in the research to be strongly related to teenage pregnancy.

Partnership Academies

Partnership Academies is a school dropout prevention program. Since dropping out of school is so closely linked with teenage pregnancy, such programs may also reduce teen births. Partnership Academies is one of many approaches being implemented in the schools to improve the connection between students and the world of work. They are school-within-a-school programs, with smaller size classes and a curriculum integrated around a particular industry or career (such as health care, criminal justice, aerospace or hotel and restaurant management). Because many teenage mothers see so little of value for themselves in school, all efforts to increase the relevance of education for them may have direct effects on teenage pregnancy. The successful Partnership Academy program in Philadelphia was been the model for similar programs throughout the country. Key elements include the small size of each program (100-200 students per academy), a reduced class size, the sense of community that develops between students and teachers as each class continues through the program for four years together, and the work experiences provided to each student (Weber 1994; LAO 1994).

Programs such as this may prevent teenage pregnancies in two ways: by increasing the employment rate of males ages 18-24, and by decreasing the school dropout rates of school age females.

Teen Outreach Program

The Teen Outreach Program (TOP) has targeted both younger and older teens in a variety of socioeconomic settings with populations of various races and ethnicities. The program is built around small groups of 15-20 students meeting once a week in a mutually supportive atmosphere, facilitated by a caring and trained adult who is a friend and mentor rather than an authority figure. The program includes its own curriculum which engages students in discussion of topics such as understanding themselves and their values, cultural diversity and acceptance of differences, goal setting, decision-making, problem solving, human growth and development, parenting, family relationships and community resources. Students must participate at least one hour per week in a volunteer program. Extensive evaluations of the program over its ten-plus year history have included three years of random sampling with 472 Teen Outreach students and 496 control group students (Allen and Hoggson 1990; Allen and Philliber 1991).

In comparison to students not participating in TOP, TOP students have shown:

- A 32% lower rate of course failure in school;
- A 37% lower rate of school suspension;
- A 43% lower rate of pregnancy; and
- A 75% lower rate of school dropout.

These results are not affected by the student's race, gender, or grade, their mother's education, family living arrangement or other pre-program indicators.

There are several key factors related to this success. A primary factor is the nature of the volunteer service as perceived by the students, specifically whether they feel the work is of value and that they had a choice in selecting it. Volunteer work that is located off-campus is associated with greater success than work performed at the school site. The climate of the classroom is another key indicator for success: program sites at which students did most of the talking and felt emotional support were more successful.

Helper-therapy is one explanation postulated for the success of this program. The theory is that being a help-giver, instead of receiver, builds self-esteem in the students and enables them to picture themselves doing similar things as adults. In addition, the idealism of youth is appealed to and given an outlet. They are not just encouraged to seek money and success for personal gratification; they are encouraged to find the satisfaction of helping others less fortunate than themselves. In addition, they are mentored informally by the adults with whom they work in their service projects in hopes that they may adopt some of their values.(Allen and Hoggson 1990; Allen and Philliber 1991; Hayes 1987).

Early Prevention: The Perry Preschool

The Perry Preschool in Michigan is an early intervention program that was the model for the federal Head Start program. There are both similarities and the differences between Head Start and Perry Preschool. The Perry Preschool was targeted at children from families with low-income and low parental educational attainment. It included a 5- or 6-to-1 child-teacher ratio and well-trained and well-paid teachers. The curriculum has evolved over time. It emphasizes creativity development and

individual decision-making at an age-specific developmental level. The program includes morning classroom sessions and afternoon home visits, in which each child is visited at home for one and a half hours every week. Parent meetings are also held regularly.

The Perry Preschool evaluators followed the initial students for twenty years. These children, compared to the control group, were more successful in school, performed at a higher level, received greater recognition, and were less often placed in special education programs. Increased earnings, reduced welfare, and reduced crime are also carefully documented results of the Perry Preschool. Of special interest is the reduction in births to the females who participated in the program. They experienced half as many teen births as the comparison group. While the program is expensive, the initial cost is outweighed by the later benefits gained by the individual and society (Barnett 1985).

Summary

The programs vary widely, but most share the common features of:

- Small group size (except Reducing the Risk);
- Active participation; and
- Links to the community or home.

Pregnancy prevention involves two messages:

(1) Promote abstinence; and
(2) Promote effective use of contraception.

To motivate students to avoid pregnancy:

(1) Provide meaningful experiences relating the students to the adult world;
(2) Promote education linkages to higher paid jobs; and
(3) Present opportunities for students to envision themselves as successful persons.

Figure III-1

Summary of Model Programs

Programs	Target Population	Notable Results	Key Features
Reducing the Risk Classroom instruction 15 sessions 18-month follow-up	High school (10th grade) Suburbs and rural Including Hispanics	Reduced initiation; Reduced unprotected sex; Especially effective with: inexperienced, females, Hispanics	Role playing Practical activities
Johns Hopkins School-Linked Clinic 3-year program Fully evaluated	Intermediate and senior high school Inner city, black	Delayed initiation; Increased effective contraception; Decreased pregnancy: Sexually active and inexperienced	Small informal group discussions; Comfortable environment Accessible services
Campaign for Our Children, Maryland Statewide 20+ years	Junior and senior high school	Reduced teen pregnancy rates	Classes, clinics, media campaign, community involvement
Partnership Academies	High school students Potential drop outs or total population	Reduced drop outs Need to evaluate effects on pregnancy	Small sized program (100-200) Slightly lower student/teacher ratio Work and school integration
Teen Outreach 10 years with 3 year random sample 1 hour per week + 1 hour community service	At risk intermediate and senior high school students	Reduced class failure Reduced suspensions Reduced drop outs Reduced pregnancies	Small group (15-20) Community service Peer support Teen empowerment
Perry Preschool 20 year cost/benefit 2-1/2 hours per day 1-1/2 hours per week home visit	Low income families Low parental education Children ages 3-4	Long term: Increased school success, earnings Reduced welfare, crime Reduced teenage childbearing	Small class size (5-6) Home visits Creativity enhancing curriculum

CHAPTER IV: POLICY IMPLICATIONS FOR TEEN PREGNANCY PREVENTION PROGRAMS

Preventive Policy Options

Preventive policies that focus directly on the various segments of teenage populations are likely to engage in behaviors that directly and indirectly result in unintended pregnancies. These strategies are designed for various populations and age groups.

One target population is children before they reach puberty and before they become sexually active. This group is most effectively reached with the abstinence message, "It's better to wait."

Pre-adolescent children are also the target for early intervention programs designed to:

- Help their families function better;
- Help them succeed in school; and
- Prevent the whole range of socially undesirable behaviors that are often associated with family backgrounds of poverty, drug abuse, and low educational attainment.

Programs that are already in place could be evaluated as to their effectiveness in reducing teenage pregnancy. Further, programs that serve the constellation of interrelated social problems could be expanded and integrated to target these populations.

Programs for older teens can continue to emphasize the value of abstinence effectively, but they should also include other pro-social values, and actual work- or service-related experiences in expressing these values. Programs that serve the individual's self-perceived needs to gain training for higher paid jobs, to become employed at decent wages, or to feel useful and valued by their community could also prove to be helpful in reducing pregnancy among teenagers.

Older teens who chose to be sexually active would benefit from efforts to reduce sexual activity, and access to age-appropriate contraceptive information, prescriptions and supplies. These can be located within existing community-based health settings, and as free-standing school or community programs. Promotion of these services through various media and educational approaches could improve youth's awareness and utilization of these services.

The entertainment media, advertising, and other public education mechanisms can promote messages such as avoiding sexual intercourse until one is ready to assume responsibility for all possible outcomes, and delaying pregnancy until one is able to financially and emotionally support a family. Such efforts could serve to counter-balance the perception that sexual activity holds no responsibility.

State policymakers can assure that the public's money is spent on programs that are effective by setting policy goals, providing funding, and requiring evaluation of outcomes for continued operation. Since many problems are interrelated, government-sponsored efforts that are multi-faceted in design could prove to be more cost efficient and effective than stand-alone programs. For example, programs designed to prevent high school dropouts or to treat drug abuse or family dysfunction, juvenile crime, and even gang activity could also address teenage pregnancy.

Program Evaluation

Outcome evaluations should be applied to educational, preventive and treatment programs alike. These evaluations would provide essential information to effectively target limited public resources. With careful measurement of results and publication of effectiveness, the best approaches can be duplicated and disseminated, and the worst eliminated.

SEMINAR PRESENTATIONS AND HANDOUTS

TEEN PREGNANCY IN CALIFORNIA:
EFFECTIVE PREVENTION STRATEGIES

MONDAY, OCTOBER 3, 1994
8:30 A.M. - 11:00 A.M.
STATE CAPITOL, ROOM 4203
SACRAMENTO, CALIFORNIA

AGENDA

8:30 - 9:00 A.M. ***CONTINENTAL BREAKFAST***

9:00 - 9:10 A.M. ***WELCOME, INTRODUCTIONS AND SEMINAR OVERVIEW***

Anne Powell, M.S.W.
Director, California Family Impact Seminar

9:10 - 9:25 A.M. ***TEEN PREGNANCY: TRENDS AND ANTECEDENTS IN CALIFORNIA***

Jane Mauldon, Ph.D.
Professor, Graduate School of Public Policy
University of California, Berkeley

9:35 - 9:40 A.M. ***SCHOOL-BASED PREGNANCY PREVENTION PROGRAMS***

Douglas Kirby, Ph.D.
Research Director, ETR Associates

9:40 - 9:55 A.M. ***COMMUNITY AND CLINIC BASED PREGNANCY PREVENTION PROGRAMS***

Claire Brindis, Ph.D.
Director, Center for Reproductive Health Policy Research
Institute for Health Policy Studies

9:55 - 10:10 A.M. ***TEEN PREGNANCY PREVENTION: THE MARYLAND CAMPAIGN FOR OUR CHILDREN***

Bronwyn Mayden, M.S.W.
Director, Florence Crittenton Division and
Program Director, Adolescent Pregnancy Prevention
Child Welfare League of America

10:10 - 10:20 A.M. **BREAK**

10:20 - 11:00 A.M. **QUESTION AND ANSWER PERIOD**

SPEAKERS

Claire Brindis, Dr. P.H.

Claire D. Brindis, Dr. P.H., is an Associate Adjunct Professor in the Department of Pediatrics, Division of Adolescent Medicine at the University of California, San Francisco, and Executive Director of the National Adolescent Health Information Center, recently funded by the federal Bureau of Maternal and Child Health. She is also Director of the Center for Reproductive Health Policy Research at the University's Institute for Health Policy Studies.

Dr. Brindis is a nationally and internationally recognized expert in the field of adolescent pregnancy, pregnancy prevention, adolescent health, and school-based health services. She has conducted numerous research projects and policy analyses in the area of comprehensive school-based health centers in California, adolescent pregnancy and pregnancy prevention, and services for chemically dependent pregnant and parenting women. In addition, Dr. Brindis conducts research in the area of child health, adolescent risk-taking behavior, and adolescent health policy, including the implications of health care reform on adolescent health. In addition to her extensive research and publications in these areas, Dr. Brindis has achieved prominence as a policy advisor to federal, national, state, and local governmental policymakers. Her guidance and policy direction in the areas of adolescent pregnancy and pregnancy prevention, school-based health clinics, adolescent health, and reproductive health services is frequently sought in non-governmental sectors as well. For example, her writing and publications in the field of adolescent pregnancy and pregnancy prevention, as well as her personal consultation, were extensively utilized in the planning of California's statewide Adolescent Pregnancy Prevention Initiative, which has been funded annually at $15 million since 1991. A major facet of this ambitious initiative, clinic-based interventions is 40 sites throughout the state, is currently being studied by Dr. Brindis. This evaluation study is one of the largest of its kind ever conducted in the field of family planning and adolescent pregnancy prevention. Dr. Brindis also conducted a cost-benefit analysis which demonstrated that the State of California saves $12.20 in avoided health and social services costs for every dollar spent on family planning services. This study provided crucial evidence that prevented the elimination of the California Office of Family Planning (OFP) when it was under attack by the previous state administration, and was further utilized by the current Governor to justify expansion of the OFP program budget by $10 million annually.

Douglas Kirby, Ph.D.

Douglas Kirby, Ph.D., is Director of Research at ETR Associates in California. He has directed nation-wide studies of adolescent sexual behavior, sexuality education programs, school-based clinics, and direct mailings of STD/AIDS pamphlets to adolescent males. Currently he is principal investigator or co-principal investigator of large evaluations of Postponing Sexual Involvement, a curriculum designed to delay the onset of sexual intercourse, and of Safer Choices, a comprehensive school-based program designed to reduce unprotected intercourse. He co-authored research on the Reducing the Risk curriculum which substantially reduced unprotected intercourse, both by delaying the onset of intercourse and increasing the use of contraception. Recently, he has directed a national panel of experts who have reviewed the literature on school-based programs designed to affect sexual and contraceptive behavior. Over the years, he has also authored or co-authored numerous volumes, articles and chapters both on these programs and on methods of evaluating them.

Bronwyn W. Mayden, M.S.W.

Bronwyn Mayden is the Director of the Florence Crittenton Division and Program Director, Adolescent Pregnancy Prevention and Parenting Services for the Child Welfare League of America. She formally was the Executive Director of the Govenor's Council on Adolescent Pregnancy in Maryland. In that position she was responsible for developing a statewide adolescent pregnancy prevention agenda, mobilizing public and private resources, organizing interdepartmental activities related to adolescent pregnancy prevention, and coordination of Campaign For Our Children, the media and public education program aimed at delaying sexual initiation among adolescents.

As the Executive Director of the Govenor's Council, she secured an increase in funding for family planning services for sexually active teens by $2 million annually, initiated Campaign For Our Children, created PACT!, a statewide public awareness campaign that promotes the role of parents as well as the sexuality educators of their children and instituted

Community Incentive Grants which provides funds for local teen pregnancy prevention projects. Under Ms. Mayden's leadership, the Govenor's Council on Adolescent Pregnancy has been lauded as a national model for statewide initiative on teenage pregnancy. Additionally, the number of births to adolescents has decreased by 13% during the years 1989 to 1990.

Ms. Mayden has an extensive history in policy analysis and program development. She frequently is a guest speaker at conferences on population control, including adolescent pregnancy.

Ms. Mayden received her Masters Degree in Social Work from the University of Maryland School of Social Work and Community Planning and her Bachelor of Arts degree from Lincoln University in Pennsylvania.

Jane Mauldon, Ph.D.

Jane Mauldon is a demographer on the faculty of the Graduate School of Public Policy at the University of California, Berkeley where she teaches courses on social welfare policy and statistical methods. Her research focuses on the health and well being of children and adolescents and on welfare policies in the United States. She is currently studying contraceptive use among AFDC recipients. She is also co-directing the data collection effort for the evaluation of Cal-Learn, California's welfare reform initiative for pregnant and parenting teenagers.

SPEAKER PRESENTATIONS AND HANDOUTS

M. Anne Powell, M.S.W., CAFIS Director

Welcome to the California Family Impact Seminar's third seminar this year. Today is the first of two seminars on Teen Pregnancy, focusing on effective prevention strategies. Our next seminar, on October 24th, will address the issue of teen families and welfare dependency.

Jane Mauldon, Ph.D.

Dr. Jane Mauldon is with the Graduate School of Public Policy at U.C. Berkeley. Dr. Mauldon is a demographer who is doing a great deal of work in this area and is probably best known in state government for her work on the Cal-Learn evaluation. She has assembled for us today a lot of very interesting information on teen pregnancy trends in California.

Teen Pregnancy: Trends and Antecedents in California

I'm going to be talking about the trends in teen births in California primarily.

Beginning with the birthrates per thousand women, teens 15 to 19, in the state and comparing them with the national figures, what we see is that what happens in California leads the nation. So previously, California birthrates fell before the nation's birthrate. We're finding, starting in the late '80s that California birthrates have been rising and are now somewhat higher than those in the nation, approaching 80 births per thousand.

The four-year span of age is 15 through 19. About 23 percent of births to teens in the state are second or higher order births. California looks very much like the United States in numbers of high order births. Among very young mothers, 10- to 14-year-olds, of whom there are very few, essentially all (95 percent) of the births are first births. But at the same time, we're finding that, among 15- to 17-year-olds, about 17 percent are second or higher births. Among 18- to 19-year-olds 35 percent are second or higher order births. The 80-births-per-thousand then encompasses more than just first order births.

How many births are we talking about anyway? And to what ages? There were about 25,000 births to 19-year-olds, about 20,000 births to 18-year-olds; and we see it declining with each year, 17-, 16-, 15-, 14- and 13-year-olds, with trivially small numbers in the very, very young ages—which is what we hope for.

It is important not to get the wrong impression when we're talking about young teen births. How many births are we talking about?

<u>Numbers of births</u>. These are not birthrates. Most of the action is in Los Angeles county, accounting for over one-third of all births of all ages. Over a third of all births are to teens, 24,500. Between 3,500 and 5,500 births to teens occur in the four counties adjacent to the area of San Diego and San Bernardino. The next geographic areas with a large number of teen births were Alameda, Fresno, Sacramento, Kern, and San Joaquin counties. These counties account for three-quarters of the births to teens in the state of California. So a lot of the action just in terms of numbers occurs in the four southern counties, because that's where most Californians live. (See Map 4 in Chapter I.)

As we start looking at births to younger and younger women, we begin to find more concentrations appearing in other counties. For example, there are about 28,000 births to girls 15 to 17 in the state. We are beginning to see the largest numbers in Los Angeles, San Diego, Orange and San Bernardino Counties, and Fresno, Riverside, and Sacramento Counties also have large numbers of teen births.

For births to the 10- to 14-year-olds who are talked about in the press, there were in fact about 1600 births statewide in 1992 to 10- to 14-year-olds. Those are 1600 girls that we need to worry about. There were only 1600 girls in the state

of California in 1992 who gave birth in that age range. It is certainly a problem for them and it's a problem for the social services that have to help them, but it is not a huge number.

Where are they happening? Again, a third of teen births are in the county of Los Angeles, and in Fresno, which begins to join the top four. We'll see those patterns appearing now when we look at teen birthrates.

I want to express a huge debt of gratitude to the Alan Guttmacher Institute (AGI) for calculating county-specific teen birthrates by age. It is easy to get the state numbers, but the challenge is to figure out the number of teens in each county, which AGI was able to do.

The counties with above average teen birthrates are not the same as the counties with the largest number of teen births. Rates do not depend on a large number of people living in a county.

What is striking and what will continue to be apparent throughout the next set of maps is the important role played by the counties of the Central Valley. Kings, Yuba, and Sutter Counties have teen birthrates in excess of 110 births for 15- to 19-year-olds. Kings County is kind of the center of this larger group where the birthrate is 115 per thousand. Fresno, Kern, and Tulare Counties all have teen birthrates in excess of 100 per thousand.

The counties with the highest rates are actually the rural counties. They are not really the urban counties. There is something a little bit misleading about this, because if we would look at some of the cities specifically, I believe we would find high teen birthrates. But on a county basis we have quite a lot of affluent suburbs where the rates of teen births are quite low, such as near Oakland where I suspect the rates are quite high. So there is overall an urban/suburban mix, which yields a lower than average birthrate for teens than we generally have in the Central Valley. These are primarily rural counties, but of course we have some very large cities, Bakersfield, Fresno and the like. I don't have actual urban/rural breakdowns. It would be interesting to get them.

Birthrates by race and ethnicity. If we start looking at this by race and ethnicity, which is immediately what people ask me about when I show them the map with the high rates in the Central Valley area, there are a couple of other things to notice. County birthrates range from 20 to a little over 120 per thousand per year for 15- to 19-year-olds. The statewide teen birthrate is 71 per thousand. For African Americans it is 104 per thousand and for Latino women it is 117 per thousand. White and Asian are considerably lower, at 41 per thousand.

We get a somewhat different picture if we look at the rate of births within each racial and ethnic group. A birthrate is determined by computing the number of births to a subpopulation of women per one thousand births that occur within a larger population of women. Therefore, the high Black birthrate may not necessarily mean that a large fraction of African American teen women are having babies.

A couple of interesting things to note . Sixty percent of all teen births throughout all the teen years are Latino. The remaining 40 percent are divided. The birthrates are proportionately somewhat higher at the younger ages for Asians and African Americans. Childbearing starts younger and occurs with more frequency at younger ages among African American and Asian women than among Latino and White women. The proportion of births to African Americans in the very youngest group is larger than it is in the older group of teens.

Let us now look at the parity question, this time by race and ethnicity. If you look at the percent of births for 18- to 19-year-olds, you see that about one-third of Latino births in this group are in the second order or higher. For Whites, it is somewhat lower, about one-quarter; and then for Blacks and Asians it's pretty similar to the Latino figure, at over one-third.

Among 15- to 17-year-olds what we find is that for the relatively small number of Asian girls who started childbearing very young, by the time they reached 15 to 17 quite a substantial fraction, 20 percent, had second order or higher births. And yet you will recall that the birthrates for Asians are lowest of all the ethnic groups. So there is a concentration of childbearing in a small number of Asian teens, and they are also having a second and sometimes third child in their teen years. Fifteen percent of Latino girls are 15 to 17 and the figure is slightly higher for 18- to 19-year-olds.

We see concentrations in the Central Valley and in Lake and Lassen Counties. Lake County has an unusually high teen birthrate in every group. The Latinos show above average rates. For African Americans, the above average teen birthrate is concentrated in Lake County. We are seeing more in Sacramento County, San Joaquin County, and Tulare County.

Those are some of the main patterns by county. I'm just going to talk briefly about ways that we can try to understand these patterns. Patterns of teen birthrates vary greatly by race and ethnic groups. They are concentrated in certain counties and not in others. It is clear that there are some systemic aspects to teen childbearing. They are related to some systemic factors. There is, however, also a great deal of randomness. While we can find strong social and, to some degree, biological correlates of teen childbearing, there is still a great deal of chance in exactly who becomes a teen mother.

We can think of it first biologically, so to speak. We've got sex, we've got contraception, and we've got abortion. And those are the three steps that we look at in thinking about adolescent pregnancy. Exposure to sex; age at first sex. Just to debunk certain myths: age of first sex has come down somewhat in the last few years. But nevertheless, we see that the relevant and mean and model ages are between 16 and 17 for first having sex. Sixteen year olds, less than half have had sex; seventeen year olds, more than half have had sex. That 16- to 17-year-old period is quite important. Quite a few young women are having sex quite a bit before they hit age 16 but not a great deal. Fortunately not very many at very, very young ages are. Nine percent of 12-year-olds, 23 percent of 14-year-olds. By the time you get to 19-year-olds, 82 percent have had sex.

As for frequency, quite a few are having sex several times a week, but quite a few have sex less than once a month. So there is quite a bit of variance in frequency of sex. It's important to note what we've only recently really begun to explore systematically in the research literature—that there is a lot of involuntary sex—rape, incest. The younger the girl is when she starts having sex, the more likely it is that it is involuntary. The numbers are shockingly high. These come from the Alan Guttmacher Institute's recent publication *Sex and America's Teenagers*. Similar findings turn up in a variety of studies. If a girl has sex at 13 or younger, three quarters of those girls have had involuntary sex or have been raped. If they began by age 15, this number is 40 percent. So young age at first sex is very much an issue of nonconsentual sex.

I'm going to leave the topic of contraception to my colleagues, except to say that a lot of teens do, in fact, use contraception, but they don't necessarily use it effectively or all the time or correctly. If you look at the numbers who say they are not contracepting currently, you get 28 percent of the younger and 16 percent of the older teens. You can sort of break it out across different races and ethnic groups and get somewhere between 16 to 35 percent who say they are not contracepting. But notice that the large majority report that they are contracepting.

If a teen has sex for a year with fair frequency and does not contracept, there is a 90 percent probability that she's going to get pregnant. Once they get pregnant, do they abort? A lot of teens do abort. Eighty-five percent of teen pregnancies are described as unintended, not wanted or not wanted at that time. This is compared to 55 percent of pregnancies to older women which are also not wanted or not wanted at that time. We have in this country a very high rate of unintended pregnancy in general. About half of teen pregnancies are aborted. A higher proportion of higher income teens abort than lower income teens. And there's been some decline in abortion since 1988 but not a huge decline.

Let me give you a framework of thinking about the factors affecting these activities: sexual activities, contraception, abortion, and childbearing. I like to think of them as sort of the different contexts in which young women find themselves and I would like to talk about some of factors that have a more unique sense. Experiences in the family origin are very important here, as are the number of siblings and the age of first childbearing. Whether the young woman grows up in a family and what she learns about family making are important, and what she might learn or not learn about contraception also has a bearing.

First of all, there are factors arising out of the transition from childhood to adulthood: the kinds of goals chosen and the opportunities that a young woman has—that is, the actual educational and employment opportunities facing her and her own assessment of her likelihood of being able to participate in educational opportunities. Also relevant are things like her grades in school, whether she's already dropped out, whether she's been held back in school. Lower income women are more likely to start childbearing at young ages than higher income women.

There are also community factors. We have the geographic community. We were just looking at the distribution of teen births by geographic factors. Geographic factors, especially on a county-specific or city-specific basis, have a great deal to do with policies. Schools are run by local school boards and schools to some degree. Local services are funded by the money coming from local cities and local counties. Those turn into geographic factors.

We were looking at the state of California. We can take a look at the nation and see how different states look with regard to these factors. And again we can talk about the state's specific policy and how it shapes the experiences of teens in those states. It is very interesting to think about how public policy operates in geographic units. There are other communities that are important as well—different sorts of ethnic communities, peer relationships, religious values—the different affiliations that young women have, apart from their families of origin, that help shape their attitudes toward teen pregnancies.

What are the social or individual characteristics? Motivation at school, history of sexual abuse, the emotional aspects. A lot of young women say they had a child because they wanted somebody to love or who would love them. There is a very big debate in the research literature and in the policy world about whether teen childbearing is really the problem itself or if it is actually a symptom of another problem. And, if it is a symptom of a problem, what problem it is a symptom of? If we try to target our policies directly at the teen childbearing issue itself, are we doing a favor to the teens? Because if it is just a symptom, is it in fact a symptom that is helping her cope with a very difficult situation or is it a symptom which aggravates that very difficult situation? There is a lot of debate surrounding these kinds of questions.

Back to the data for the state of California. I would like to look very quickly here at marriage rates. We see patterns. This is a question of looking at marriage by ethnicity and by age of mother. There are two interesting things to note. If you look at African American teen women's ages, you find that the proportion who are married does not change much by age. The proportion married is about half. For Asians it is about 10 percent the rate of African Americans. But that is not a strong trend by age. You either marry or you do not. Among Hispanics we do find a strong trend by age, rising from a little over 10 percent to somewhere in the range of 31 to 35 percent marrying in the older teen ages.

Finally, what about the age of the father? About 20 percent of teen parents overall report that the father of that child is more than six years older than they are. Eighty percent report that the father of the child is older by five years or less. Five years is not an unusual age gap in general between men and women. However, for teens five years can be a lot more than it is for people in their 20s and 30s.

So, how big is five years? Among the 1600 mothers who are 10- to 14-years-old about a third did not report the age of the father. So we can either assume those unknown ages are the same age as the distributions that we have, or we might think that they are considerably older. We might think they are younger. We don't know.

Looking just at the distributions that we do have, in this age group the father is greater than or equal to 25 years. It's not a situation where we have data reporting 40-year-olds who are having sex with the 15-year-olds. That is not the picture. This is a very small fraction, three or four percent or so. For 10- to 14-year-olds, 40 percent of the fathers of their kids are under 17. So there is certainly an age difference there. By the time they get to 18 or 19, you can see that somewhere around 20 to 25 percent report that the father was over the age of 25. And they themselves are approaching 20. The large majority of children born to teens have fathers in the 20 to 24 age range. Certainly the men are older.

Jane Mauldon - Overhead #1

Jane Mauldon - Overhead #2

Jane Mauldon - Overhead #3

Jane Mauldon - Overhead #4

Jane Mauldon - Overhead #5

Jane Mauldon - Overhead #6

Jane Mauldon - Overhead #7

Jane Mauldon - Overhead #8

Jane Mauldon - Overhead #9

Jane Mauldon - Overhead #10

Jane Mauldon - Overhead #11

Jane Mauldon - Overhead #12

Jane Mauldon - Overhead #13

Jane Mauldon - Overhead #14

Jane Mauldon - Overhead #15

Jane Mauldon - Overhead #16

Jane Mauldon - Overhead #17

TEEN CHILDBEARING:

"THE PROBLEM" ITSELF
OR A SYMPTOM OF THE PROBLEM?

SYMPTOM OF WHAT?

? - Individual and family disadvantage

? - Breakdown of social systems

? - Perverse incentives

? - Collapse of moral norms and social sanctions

"BIOLOGICAL" ANTECEDENTS

A. FREQUENT/EXTENDED exposure to sex

&

B. Does not use EFFECTIVE contraception CORRECTLY or ALWAYS

&

C. Does not abort

A. EXPOSURE TO SEX

- Age at 1st sex (1990 data):

  9 % of 12-year-olds have had sex
  23 % of 14-year-olds have
  42 % of 16-year-olds have
  59 % of 17-year-olds have
  82 % of 19-year-olds have

- 23 % have sex once a month or less

- 25 % have sex several times a week

- INVOLUNTARY SEX / RAPE, INCEST

  Of teens who have had sexual intercourse:

  If began ≤ age 13, 74 % have been forced
  If began ≤ age 15, 40% have been forced
  If began ≤ age 18, 15% have been forced

B. "NOT USING CONTRACEPTION"

- Many teens use contraception, but not always
  - effective method
  - all the time
  - correctly

- Percent not contracepting "currently:"

15-17	28%
18-19	16%

- Groupings by race/ethnicity & by income give ranges of 17% - 35% not using contraception

⇒ Pregnancy rates among sexually experienced teens fell in the 1980s about 20%, BUT still much higher than Europe

C. DID NOT ABORT

- Many pregnancies to U.S. women are not intended:

  88% for teens
  55% for older women

- 53% of unintended teen pregnancies are aborted

  Among higher-income teens $\approx$ 75%

  Among lower-income teens $<$ 50%

- Some decline in abortion and consequent increase in births to teens 1988 - 1990. (? $\rightarrow$ 1994)

FACTORS AFFECTING

- Sexual Activity
- Contraception
- Abortion
- Childbearing

A. Experiences in family of origin

B. Transition to adulthood: goals, choices, opportunities

C. "Community" factors: geographic, "cultural" (ethnicity, peers, religion...)

D. Psychosocial/Individual characteristics

IMPORTANT CROSS-CUTTING FACTORS:

- Poverty
- Low parental, especially maternal, education
- Race and ethnicity

A. Family of Origin:

"Pro-kid?" or "Anti-contraception?"

- Mother's age at 1st birth
- Number of siblings
- Older sister had kid as teen
- Biological father absent from home
- Talk with parents about contraception
- Poverty
- Low maternal education

B. Goals, Choices, Opportunities:

Motherhood (and/or wifehood) VS Education/Employment

_____ in competition with _____?

_____ taking the place of _____?

_____ preferred to _____?

_____ leading to _____?

[i.e. seeking security for self and kid]

C. "COMMUNITY"-WIDE FACTORS:

- Geographic
- Ethnic
- Religious
- Peer Group

1. Social Support/Sanction for (laws, norms, resources, etc.):

   - sex in general
   - teen sex and contraception
   - childbearig and kids in general
   - teen childbearing
   - unmarried childbearing
   - abortion

2. Options:

   - schools and training
   - jobs
   - AFDC
   - family allowances
   - sex education
   - child care
   - maternity leave

D. PSYCHOSOCIAL FACTORS; OTHER INDIVIDUAL CHARACTERISTICS

- History of sexual abuse
- Depression (?)
- Emotional need: "want someone to love"
- Delinquent/unhealthy behavior (alcohol, drugs, smoking)
- Low aspirations, low future orientation
- Impulsivity (?)
- Poor grades in school
- Has already dropped out
- Frequently truant/absent
- Held back a grade
- Low religiosity
- Weak affiliation

MARRIAGE AND CHILDBEARING

1. In theory, and typical for older women:

   Marry → Conceive→ Have baby

2. A common pattern for teens in the past:

   Conceive → Marry→ Have baby

3. A not unusual pattern today:

   Conceive → Have Baby → Marry ...
   [to father??]

Douglas Kirby, Ph.D.

Douglas Kirby is Director of Research at ETR Associates and has directed nation-wide studies evaluating school-based teen pregnancy prevention programs. "School-Based Programs to Reduce Sexual Risk Behaviors: A Review of Effectiveness," by D. Kirby, R.P. Barth, N. Leland and J.V. Fetro, Family Planning Perspectives, 1991, 23(6):253-263 was distributed to seminar participants.

School-Based Pregnancy Prevention Programs

Jane Mauldon has talked about the nature of teen pregnancy and the fact that births have increased over the last few years and has laid out some of the antecedents. We are now shifting from the problem to possible solutions to that problem. What can we do to reduce teen pregnancy and unintended births in this state? I will be focusing on school-based approaches. Claire Brindis, who is going to follow me, will be focusing on the community and clinic approaches. So between us, we are trying to cover both areas.

Why am I focusing on school-based approaches? What are some of the virtues of working within schools? All of you who work in schools probably know the answer. And the answer is because that is where young people are. Virtually all young people are in school at some point in their lives prior to their initiating intercourse. About 95 percent of all children and youth are in either elementary or secondary schools and increasingly larger percentages, now more than a majority of all young people, are actually enrolled in school when they initiate intercourse. So that means schools give us one possible institution where we can reach youths before they initiate intercourse, and that also is where we can reach more than half of them after they initiate intercourse.

Having said that, I want to move on to several different kinds of programs. We think about education very generally, not just reproductive education, but education very generally. We know that it does have a large impact upon adolescent sexual behavior, teen pregnancy rates, and birthrates. We do know that schools have contributed to a decline in birthrates between 1954 and 1974. A very critical decline, and quite substantial. It did that in part because young people, young women in particular, decided they did not want to get married—to graduate high school, immediately get married and have a child all within a short period of time. Instead, they decided, many of them, to increase their education, to further their career aspirations—they wanted to delay giving birth. And schools played a strong part, not the entire role, but one part in that delay in childbearing.

That has been replicated also now in developing countries throughout the world, many developing countries. As the educational level of young people, and of young women in particular, increases, the birthrates of those women decrease. That same phenomenon happened among adolescents here in the United States. So that is an important point to remember about education programs in general.

Now I want to focus upon reproductive health programs within schools, basically sex education, school-based clinics and school condom programs. Now a very simple question is, do they work? And, unfortunately, the answer is not quite so simple. The answer is, some sex education programs clearly delay the onset of intercourse and reduce unprotected sex; others do not. Some school-based clinics reduce unprotected sex; others do not. The same thing is true with school condom programs. So for the remainder of my presentation, we are not going to focus so much on do they or do they not work, because that question is answered by some do and some don't. What I'm going to focus on are the characteristics of each of these three kinds of programs which relate to the success of those programs.

The first focus is upon sex education programs. I'm going to talk a little bit about this simply because we have much more research on those and there have been far more studies done during the past 15 years. There have been several generations of sex education and HIV education programs in this country. The first generation was for the most part knowledge-based. About 15 years ago many of us believed that if we gave youth accurate information, if they knew unprotected sex would likely lead to pregnancy, if they knew that having sex for the first time was taking a risk, that then they would rationally choose not to engage in unprotected sex. All kinds of myths existed and to some degree still exist. We believed if we corrected those myths that would change their behavior. That was plausible, but the data pretty clearly indicates that increase in knowledge alone does not have that much of an impact on behavior. It turns out that knowledge is not highly related to behavior in the sexual arena. That does not mean that ignorance is the answer. I'm not claiming ignorance is the answer; it is not. What it does mean is that knowledge alone is not enough.

Second generation programs began to realize this. And they began to focus upon values and skills, but commonly they were very generic values. One of the activities involved the lifeboat example. You are asked in school to think about a situation where you're in a boat which is sinking. There is a lifeboat. There are 15 of you but the lifeboat can only hold 10 people. What do you do? This type of activity forces you to think about some of your basic values and to clarify those values. Now I think that's an interesting activity, a good activity, but that kind of generic values clarification activity does not appear to be highly related or significantly related to sexual risk-taking behavior.

The same thing is true with generic skills. I must confess for a long time I'm embarrassed to say I thought an "I message" meant you established clear eye contact. No, that is not what an "I message" is. An "I message" is saying "when you do such and such to me, I feel a certain way." I want you to change that behavior. So it's saying you feel a certain way about something. Again this is an important skill for young people to have. Simply teaching this generic skill alone does not seem to have much of an impact on behavior.

The third generation of programs grew out of the second generation. These were programs which had a very clear message and a particular message of abstinence only. They focused on abstinence only. Many of you have heard of these teenage Sex Respects and other programs which basically take the position we should emphasize only the value that young people should not have sex until marriage. There have been three studies which have been published which evaluate the impact of those. All three of those studies failed to find a significant impact upon behavior. But I want to add a very important caveat. All three of those studies were very methodologically limited and very methodologically flawed and did not have a reasonable chance of finding an impact upon behavior.

So basically at this point in time my findings and the findings of all of us in the CDC (Centers for Disease Control) panel is that we simply don't know whether or not curricula which emphasize abstinence do in fact have an impact on behavior. They may; they may not. We do not know at this point. The fourth generation of studies were those that were more theoretically based and which also have been more rigorously evaluated. And frankly it's an exciting time in our field right now because there are about a dozen studies that have been well designed. About half of them found that programs did have an impact and about half showed they did not have an impact. So we can now compare for the first time ever the characteristics of the programs which did have an impact against those that did not have an impact.

You see on the top page of the handout the names of five different curricula which have had an impact. These have all measurably reduced some type of sexual behavior. These are not necessarily typical or average data, but rather some of the most encouraging results. The first one just shows Postponing Sexual Involvement, (PSI) which has a program group which received PSI on the left and on the right is a comparison group which did not receive postponing sexual involvement instruction. You can see that by the end of eighth grade only about four percent had initiated intercourse among the program group of the PSI group. In the comparison group the number is much larger, about 20 percent. At the end of the ninth grade you can see there is a larger difference. This time it is 24 percent versus 39 percent; 39 subtract 24, you get 15; 15 over 39, that is about a 38 percent reduction in the initiation of intercourse. For our field, these are dramatically good results. I'd also like to point out to you, as several of you know, that postponing sexual involvement is the key component in a current statewide initiative called ENABL (Education Now and Babies Later). PSI is being implemented as part of this in many schools throughout the state. Hundreds of thousands of youths had just received this curricula within the last two years and there will be more in the years to come.

Another curriculum is Reducing the Risk. Reducing the Risk is for a somewhat older group of youths. Its message is that you should avoid unprotected sex and the best way to do that is through abstinence. If you have sex, you should be sure to use contraception. The difference in the percent who initiated intercourse was 29 percent in the program group and 38 percent in the comparison control group.

Now the overall goal was to reduce unprotected sex, both by delaying the onset of intercourse and by increasing the use of contraception. Here we see large differences: 16 percent of the comparison group, and only 9 percent of the program group engaged in unprotected sex. This is a 40-percent reduction. I should point out that these data are based on those that had not yet initiated intercourse at baseline. It turns out it is probably easier as we see from these studies to impact youth by reaching them before they engage in intercourse. Once they have engaged in sex and have habits well established, it is difficult to change those habits.

Another curriculum is the Jemmott Curriculum. There is a very large difference in the percentage that had sex and did not use condoms during the next three months. There is also a large difference in the number of sexual partners. Again there is a large difference between these. The Jemmott Curriculum was designed for higher risk youth. Its message basically was if you have sex, always use a condom or you might die of AIDS. It was implemented in a very high risk area where AIDS was in fact quite prevalent and HIV was quite prevalent and most youths were engaging in intercourse.

One thing we need to learn from this is that educational programs can delay the initiation of intercourse, they can increase the use of contraception, can reduce unprotected sex, and reduce the number of sexual partners. I say they can do those things, but not all of them do.

The next page shows the characteristics of those programs which are effective. Effective programs basically are more narrowly focused. They focus on reducing sexual risk-taking behavior. They are not terribly comprehensive, rather they are focused. But that does not mean that comprehensive programs cannot be effective. In fact very few of them have actually been evaluated, but of those that were effective, all of them were focused. They were all based upon social learning theories.

Social learning theories tell us that we need to be concerned with more than just knowledge. Particularly they tell us that the behavior is a function of at least four things. It is a function of understanding of what must be done to avoid sex or to use protection. Behavior is a function of a belief. We anticipate the benefit of delaying sex or through use of protection. You have to personalize basic information so it becomes a belief. That in turn provides motivation. Third, behavior is a function of the belief that particular skills or methods of protection will be effective. That's outcome expectancy, in psychological jargon. And finally, behavior is determined by the belief that he or she can effectively use these skills and methods of protection. She or he has the skills and has the self-discipline to use those skills.

Effective programs provide basic information and a whole variety of interactive activities to personalize that information. They do not do what I am doing today. They do not lecture. If you just lecture the kids, you lose them. They tune out. Rather, they should be involved in communicating with the parents, in role-playing, identifying bonds. They go to drug stores and find where condoms are and how much they are priced for, etc. All these activities are not what we call passive learning. They are experiences that involve interaction. All of them also address social and/or media influences on sexual behavior. Typically they talk about lines that guys or girls use to get sex. They talk about responses to those lines. That helps young people then to identify something that is a line. So when a guy or a girl starts putting pressure on them, kids know how to respond. Effective programs have a clear message.

This is particularly important because this characteristic may be the one which most clearly defines less effective programs from more effective programs. They have a very clear message. That message is both age and experience appropriate. By that I mean it is designed for young people, 6th, 7th or 8th grades. For those who had not had sex the message is you should postpone having sex. If it is designed for a slightly older group and some of them have had sex and some have not, the message is you should avoid unprotected sex or practice abstinence, but if you do have sex, use condoms or another form of protection. For the high-risk group where virtually everyone is having sex, the message is always use condoms. All of those are effective messages, but the clarity and emphasis upon that message is very important. Everything within the curriculum is directed towards that message.

They provide a practice and modeling of skills and various ways to do things and various ways to say no, much the same as with substance abuse. So in conclusion, on sex education programs, not all curriculums are effective. Knowledge is not enough. Generic skills are not enough. But the curriculum that has the characteristics I have just described can delay intercourse and will increase the use of protection and contraception.

I want also to talk about school-based clinics and school condom programs. School-based clinics are not designed fundamentally to reduce teenage pregnancy. School-based clinics are designed to provide health care to young people, and they do that quite well. About 70 percent of all kids enrolled in schools—this is kind of an average across the country—actually use the clinic. Reports show that large percentages of high-risk students use it. The high-risk student is more likely to use the clinic. Students who like the clinic say they are satisfied with the care they received there. And many of the clinics provide care in a cost-effective manner. So that should be enough to say this represents a reasonable model of care.

Perhaps we also need to ask the question, do school-based clinics reduce teen pregnancy rates? The answer is that probably most of them, or some of them at least, do not. And that's in part because they're not designed to do so. Many of them don't even prescribe or dispense contraception. Many of the primary types of visits are for acute medical care, colds, sore throats, things of that nature, and are not for reproductive health. So they reach only a small percentage of the students per school for reproductive health issues.

There are, however, a couple of clinics that probably have had an impact upon reducing unprotected sex and many times on reducing teen pregnancy and birthrates. Those clinics have a program designed to reach all of the youth in those schools. The programs reach out and combine with the educational components which then in turn reach all the student or many of the students in the schools. For example, there is a program at Balboa High School in San Francisco in addition to good educational programs throughout the school and a lot happens within the San Francisco community more broadly. We found over time the percent of students that had sex did not increase, but the percent of students who used condoms whenever they had sex substantially increased. So I think the lesson to be learned there is that the program is a realistic program designed to reduce unprotected sex, designed to reach all the students in the school, and it can have an impact.

Training school condom programs. There are more than 400 of these programs in the country. We know that many of them in fact do not give out enough condoms to young people to have a measurable impact upon condom use among all the students in the school. On the other hand, some of them do. Some of them give out a number of condoms equivalent to about one per student per month. So if some students are not having sex, that leaves about two condoms per month for those who are having sex. A fair number of condom programs indicate that probably those programs are having an effect upon condom use within those schools.

What are the characteristics of these programs which are more effective at distributing condoms? First they make condoms available where anyone can come and get them. Secondly they do not distribute them only through condom machines. The condom machine seems not to be an effective mechanism in schools. Third, they are likely to distribute condoms through a school-based clinic. Having a clinic there definitely helps. Fourth, they have a supportive school environment. Fifth, they have a sex education or HIV education program that's taught in schools and emphasizes condoms. Sixth, they don't require parental consent. And seventh, there is no restriction on the number of condoms that they can give out. If you implement a program with those seven characteristics, the chances of giving out a lot of condoms and of the students using them are greatly increased and you have a significant chance for success.

In conclusion I want to make just two points. The first is that all of these programs that I've talked about, the school sex education program, school-based clinics and school condom programs, are not magic bullets. None of them are completely effective. And none of them totally delay the onset of intercourse or provide protection for everybody in school. None of them do that. There are no silver bullets anywhere. It is a complex problem. Secondly, all three kinds of programs can apparently make a difference if the emphasis is strongly on sex education programs. It is not just implementing any type of sex education program or any type of school-based clinic. Rather you need to implement the kind that have the characteristics that I have described. And if you do so, then school-based programs can be an important component of teenage pregnancy prevention.

Douglas Kirby - Overhead #1

Douglas Kirby - Overhead #2

Douglas Kirby - Overhead #3

Douglas Kirby - Overhead #5

Douglas Kirby - Overhead #6

Douglas Kirby - Overhead #7

Douglas Kirby - Overhead #8

Douglas Kirby - Overhead #9

Claire Brindis, Ph.D.

Claire Brindis is known for her work as Director of Policy at U.C. San Francisco's Center for Reproductive Health Policy Research Institute at the University's Institute for Health Policy Studies. "Adolescent Pregnancy Prevention for Hispanic Youth: The Role of Schools, Families, and Communities," by Claire Brindis, Journal of School Health, September 1992, 62(7):345-351 was distributed to seminar participants.

Community and Clinic-Based Pregnancy Prevention Programs

I want to build on what both Jane and Doug have talked about and use some technology, too.

One of the main messages you just got from Doug Kirby is that simple solutions do not work. We need comprehensive, very specifically targeted, detailed approaches to the problem of adolescent pregnancy.

I'm going to turn your attention now to nonschool-based programs, but I thought it would be important to just spend a couple minutes reiterating some of the points that Jane raised. One of my major soap boxes for today is the fact that a lot of the interventions that we develop for you do not respond to the youths who are at risk for early childbearing.

I think it is important to remember that there are some basics to this problem, as this cartoon illustrates: "Oh, Sweetie, you can tell me. Was it poor sex education, lack of in-school counseling, no contraceptives?" "Heck, no, Mom; it was Joey." I just want to give you a couple pictures of kids, because I don't want us to forget the kinds of individuals that we talk about when we talk about numbers today. Behind the numbers, behind the programs, are the kids who need our help.

I think it is also important to recognize that not all kids are at risk, but all adolescents are going through that awkward age called adolescence. I think this little cartoon points out how awkward that period can be and that the issue as it relates to sexual behavior is something that affects not just poor kids, not just kids living in ghetto areas, but all kids across all socioeconomic and ethnic lines, income lines, class lines. We need to deal with this across society.

It's important to recognize that even when the statistics point out that a lot of young people are having sexual intercourse, the number of actual adolescent pregnancies per year has not changed considerably over time. And in fact the number has remained relatively stable primarily because there has been improvement in contraception. It is ironic the AIDS crisis has created the opportunity to talk about condoms in schools and in communities, an opportunity we would never have had without this fear of death.

I want to reiterate the whole issue of sexual coercion and that many young adolescents face this as part of their lives. That is particularly important among young adolescents, but if you look at the programs I will talk about in a couple of minutes, very few of them have actually done anything to deal with the issue of sexual abuse.

This slide says, "Would you be more careful if this could happen to you?" It shows a couple of pregnant males. We have not talked about males yet today, but the fact is that this is a very important ingredient that also requires a greater level of attention.

As Jane mentioned and I just want to reiterate again, the very important fact is that only about 25 percent of the fathers of these babies are actually teenagers themselves. If we look at the kinds of strategies that we have out there, very few if any exist that really direct our attention to dealing with young adult males in their 20s, late 20s, and dealing with the issue of adolescent pregnancy prevention. As you can see, part of the purpose of this talk is to look at the gaps in the field as well as what we know.

This is a wonderful poster that was developed by the East Bay Perinatal Counsel in the Oakland area and it says "Stop for the Sake of Love," based on that wonderful song from the sixties. They had to redo this poster because it was so popular—by the way, the slogan here is "Drinking Any Alcohol is Risky for your Baby"—and when they redid the poster, on this tray they added a line of cocaine, and now there would probably also be some crack rocks on that tray.

I think that it is imperative for us to recognize the interrelationship between risk-taking behaviors in the area of substance abuse and sexual behavior, because many of the adolescents that we are concerned about and are discussing today in this room are also adolescents who probably need a variety of other services pertaining to some of these other risk-taking behaviors. One of my messages is to think about how we can begin to link a number of adolescent risk-taking behaviors as well as concern around contraception utilization, because we all know that if you are high on drugs or high on alcohol, you are not going to be a very effective contraception user.

And I think another major theme that we cannot forget is the very high risk of HIV infection among adolescents. I was recalling, while preparing for this talk today, that my first professional job was 21 years ago as a staff member for an ad hoc committee on adolescent pregnancy in the Atlanta area. As I was thinking about those 21 years I realized how much more complex the problem is today than it was 20 years ago. Even though some of the solutions may be similar, we have a much more complex population and a much more complex society in which to find creative and innovative solutions.

I think that it is again important to think about the fact that so many of our youth are at a crossroads and they need our support. We need to think about ways that we can begin to develop supportive mechanisms and systems for them.

At issue, too, as statistics point out, is the fact that 85 percent of the births are unintended. There is a tremendous amount of ambivalence related to adolescent pregnancy, and adolescents are not that different from adults. There is a general lack of comfort around sexuality and a lack of comfort around the area of contraceptive innovation in this whole society. While we're emphasizing adolescents today, it is important to recognize that adolescents mirror the adult society in which they live. In a study that was conducted in Baltimore it was found that only about 1 in 20 teenagers indicated they definitely did not want to be pregnant. Nearly 50 percent definitely said they did not want to be pregnant. However, about 50 percent expressed ambivalence about the pregnancy. And within two years, the kids who expressed that they were ambivalent were as likely to have babies as those who had some intentions and desires for pregnancy. So we need to be thinking about how the counseling programs that currently exist deal with some of that ambivalence and, furthermore, why there is ambivalence among adolescent youth, among adolescent women in this society, about having a child.

It's very important to point out that many of these adolescents are bearing children within a nonmarital partnership. We've long debated the pros and cons about marriage, but I think that's also changing the profile of this problem.

I want to discuss some of the antecedent factors that Jane alluded to because they are important to remember as we think about how to shape programs. A very important fact is that 28 percent of adolescents have already dropped out of school before they get pregnant. So even if you have magnificent family life education programs in schools, many of those kids may not be in school. As we know in this state, a lot of Latino youth are particularly vulnerable in not continuing their education.

There are also generational patterns to contend with. It is clear from the statistics that for many adolescents bearing children, the pattern of early childbearing is an acceptable part of their cultural norm. However, if you ask the grandmothers if they are happy about their daughters having babies, you will often find that the grandmothers are very unhappy about this turn of events.

It is also important for us to recognize the vulnerability of the siblings of women who are pregnant in our young societies. Over and over again kids tell me that their pregnancy gave them a level of attention and approbation that they had never received when they were not pregnant. Who gets that message but the younger sibling of the adolescent pregnant and parenting mom.

Again, I want to point out the fact that there are very few efforts that are aimed at engaging the young men to be thinking about this level of responsibility.

Poverty is another major factor that we need to be thinking about in solving some of these problems. We cannot think about adolescent pregnancy without thinking about the economic options that are available to young people. We need to be thinking also about the multiple mixed messages from peers, media, parents, and religious communities as well as the lack of alternative roles for young women other than motherhood. And we should recognize that this is a very

controversial topic and that part of the reason it continues to be such a major problem and a major issue is that it is very difficult to come up with a consensus.

There are various factors that contribute to adolescent pregnancy in our society. They range from drug use, physical abuse, sexual abuse, poverty, lack of life opportunities, etc. The only reason I keep reemphasizing this is because I would like to examine how our programs respond to these multiple needs.

I also want to reiterate the importance of thinking about developing intervention programs for women who are faced with a second pregnancy. These are children who are going to come into a preparation course for them as they are preparing to see their mom's new baby born.

So who are the teens who are at highest risk for a repeat pregnancy? They are particularly young, as Jane pointed out, younger than 16 years of age at first conception. They also have an older boyfriend who is often older than 20. They themselves are often school dropouts. They are below the grade point level at the time of the first pregnancy. They become dependent on welfare at the first birth. They often have complications from that first pregnancy. They often leave the hospital without any birth control.

What are we going to do? Again as Jane pointed out, there's a need to think about pathways. I am not asking you to look at the numbers here, but just to be thinking about the fact that different segments of the adolescent population will need different interventions and different strategies.

These strategies need to take into consideration both capacity-building factors and life options. Capacity-building factors include solid family life, education and interpersonal skills training, information lines that give them more information, peer counseling programs, access to contraceptive care, contraceptive advertising, condom distribution programs, access to pregnancy counseling including abortion, adoption, and prenatal care. All of those services are considered traditional approaches for adolescent pregnancy prevention.

Programs which focus on life options aim at helping adolescents deal with the motivations that perhaps will help them delay early childbearing. This relates to life planning education, career counseling, school integration, employment assistance, access to comprehensive health, mental health counseling, case management, social support, mentoring, tutoring, cultural events, recreation. There are a number of youth support activities, developmentally appropriate activities, that are indeed necessary. What I am advocating is the need to think about the bridges between both approaches.

Let me now give you a brief compendium of programs. Doug has done a beautiful job in pointing out two programs within adolescent pregnancy prevention, focusing on those that are aimed at helping adolescents, at helping kids making better informed choices. And I will not spend any time on that.

I would like to focus for a couple of minutes on programs that help to increase access to reproductive services and improve family planning care. Adolescents who are receiving care from family planning clinics have the possibility of really developing or gaining a lot of the social support they need. Part of California's Adolescent Pregnancy Prevention Initiative, which is sponsored by the California Office of Family Planning, have strategies which include the ENABL program which stands for Education Now and Babies Later. It includes the expanded teen counseling program which occurs in family clinics in sites across the state, special demonstration projects that have to do with adolescent health and adolescent pregnancy and also services for chemically dependent women. There have also been efforts in the media and efforts toward expanding clinical funding. All of these strategies are currently under evaluation, but I can tell you as one of the team of evaluators, there has been a significant number of adolescents receiving services through the Office of Family Planning's California's Adolescent Pregnancy Prevention Initiative.

An example of a second type of program is the Plain Talk Initiative, which is being implemented in five cities. This initiative tries to get parents and family members and other key community informants to play a much more active role in the kinds of messages they are giving to youths. Also included is an extensive needs assessment process in which the community discovers what the extent of the problem is.

So clinic-based programs appear to be successful when they are accessible, have teen members as staff, provide confidential care, and provide special teen clinic hours, and in some programs, delaying the first pelvic exam requirement has been effective as well. There's also a new experiment going on in terms of incentives provided to teens who are coming to Family Planning Clinics. These clinics provide individual counseling, peer counseling, hot lines, sensitive outreach, follow-up and referrals.

The last area that I want to move into has to do with nontraditional family planning—alternative approaches. But here again the idea is to have a bridge between the clinical services side and the side that has to deal with life options improvement. The Teen Outreach Program, which began in Missouri and is now being replicated in a number of sites in schools throughout the state of California, aims at providing adolescents not only with family life education but also with opportunities to do volunteer work in the community so that the program really works at establishing and developing a different self-image for the young woman as well as providing her and young men who participate in these sessions which the two of them need to delay childbearing. And that program has been evaluated in other sites outside of California and has been shown to be a contributing factor to decreasing the numbers of adolescent pregnancies.

The Summer Training and Education Program as well as private and public ventures was aimed at providing adolescents with school enhancement skills, academic improvement skills, as well as family life education curriculum. And even though adolescents received about 50 hours of educational remediation and other kinds of support, the evaluation here was disappointing to people like Doug and myself when the results were found not to be specifically significant. We have to be careful, though, not to throw out the baby with the bath water. It may be that 50 hours is not a sufficient period of intervention.

It's important for us to think about the various segments that we are trying to reach in our population. It's important for us to think about the stigma that's still associated with adolescent pregnancy and the controversy and how it interferes with our creating a strategy in certain communities.

I think we should never forget the impact on the young babies that are involved. We have not talked about them today. But I also want to make a strong case for the need for continuing our evaluation of these programs and to understand and learn more about what works. Unlike Doug who can stand here and give you all the major key ingredients on a number of programs, we are in a very embryonic stage of understanding what works in nonschool settings and what works in comprehensive programs when you combine all of these different ingredients. If you don't measure the results, you can't tell if it is a success or failure. If you can't see what succeeded, you can't learn from it. And if you can't learn about mistakes, you can't correct them.

I plead for enough room for laboratory experimentations that are acceptable to communities so we can test new strategies. I have to say also, as an evaluator, that we are faced with a number of important issues. One is just finding out whether a model that was started in another area or another school setting, when you replicated it, is maintaining the fidelity of the model. If not, why has that happened? That's a very important evaluation question. We need to understand the extent of the implementation of the model, the dosage, how much intervention the adolescent actually gets, why we get surprised when kids don't respond to two visits. And finally, the logical connection between our outcomes, goals and objectives, and activities. We have very idealistic goals and objectives about what we're trying to achieve with our programs, but when we look at the funding that we provide the programs or the level of intensity of intervention I'm often dismayed. In order to create really good evaluations we need to aim for better designed studies including randomization wherever possible.

There is no single solution to the complex problem of adolescent pregnancy. We do believe that early intervention, accessible programs, continuity of care, special targeting, and multiple and reinforcing concurrent strategies are needed.

We also need to be thinking about the relationship of alcohol and substance abuse and tobacco use to the problem of teen pregnancy as well as the need for additional community-based collaboration involving adolescents, families, schools, community-based organizations and policymakers in the formation of realistic, workable solutions.

This last slide is of a letter from three teenagers to the Humboldt Health Clinic that said, "Thank you for being so nice and understanding and listening to our problems"—or 'are' problems, spelled a-r-e—"and trying to help us solve them.

You really helped us a lot and we thank you very much. We are going to miss all of you. You are really going to help a lot of people. And you already have."

And I think that for me the bottom line is understanding that an important ingredient—one that often gets overlooked—is the calibre of the people who work in these programs. We need to be sure that we can attract those special kinds of people, because it's often those people who create the anchor for these adolescents and really help them with their lives.

Claire Brindis - Slide #1

Claire Brindis - Slide #2

Claire Brindis - Slide #5

Claire Brindis - Slide #6

Claire Brindis - Slide #7

Claire Brindis - Slide #8

Claire Brindis - Slide #9

Claire Brindis - Slide #10

Bronwyn W. Mayden, M.S.W.

Bronwyn Mayden is the Director of the Florence Crittenton Division and Program Director, Adolescent Pregnancy Prevention and Parenting Services for the Child Welfare League of America. Prior to that she was the Executive Director of the Governor of the state of Maryland's Council on Adolescent Pregnancy.

Teen Pregnancy Prevention: The Maryland Campaign for our Children

The speakers before me have given an excellent overview not only in terms of what the problem is but also what some of the potential solutions are. And I want to answer that. I want to talk to you a little bit about my work over seven years in the state of Maryland. But I'm also going to end up—and actually I'll probably do it now so I won't forget—with a commercial in terms of the future, just like you heard earlier in terms of the Library Service here.

And my commercial is one that Claire really touched upon very nicely and you've already heard laid out by Jane and Doug in terms of presenting and developing programs for really high-risk youth. And that's what I'm doing right now with the Child Welfare League of America. I'm talking about kids out of foster care, kids that are homeless, kids that are incarcerated. We traditionally have not developed programs around adolescent pregnancy prevention specifically for those kids.

I am in the middle of doing some research for Health and Human Services right now on that issue in terms of foster care. Let me tell you that they have asked us to do a survey of all the states—I've surveyed 48 states so far. California, I've already done. I'm looking at what they're doing on adolescent pregnancy prevention for kids in out-of-home care, kids in foster care, or in the state child welfare system. Let me tell you that not even five states are doing anything for pregnancy prevention for those young people. But I bet this audience would know that if you look at the data, they are twice as sexually active, have twice as many STDs, end up pregnant twice as often as the rest of the adolescent population. Only one state in this nation, one state—it's not California and it's not Maryland—is keeping any statistics on young women who are in foster care and who become pregnant.

And now let me tell you a little bit about Maryland and why I'm here and why they think that what we did in Maryland was so interesting. Maryland is a small state, five million in population, a relatively wealthy state. Per capita income ranks the seventh in the country. We've had a Democratic governor for the past eight years. He's at the end of the term and his name is William Donald Shaeffer. He's 72 years of age and he's never been married. He's lived for 16 years with his mother until a few years ago when she died. Why is that important? Well, it's important because when you talk to him as I've had to about family planning issues (because I was his chief policy person on teen pregnancy and family planning) it's very difficult to get your message across to a white man who is in his 70s who has never been married, doesn't have kids and all he can say to you is "they shouldn't do it." And that's the message of a lot of politicians. And it really is nice to be here with such an esteemed group of people in the audience, as many of you are either the staff people for politicians or you are the policymakers yourselves. I think you know some of the things I was up against in trying to enact pregnancy prevention programs and policy.

Maryland is primarily a Catholic state. We did a lot in terms of family planning services, increasing access for young people in family planning, in schools, recreation centers, shopping malls and that type of thing.

I was asked to speak to you today on Campaign for our Children, a media campaign that attempts to address the problem of teen pregnancy prevention. So, what did we do in the state of Maryland and why is it so different, and why is it that our pregnancy rates and our numbers are going down in Maryland when in the rest of the country we're seeing an 8 percent increase? Well, for a number of years Maryland has had one of the highest adolescent childbearing rates in the nation. We felt that we needed an approach that didn't just do one thing. We felt that it would be politically incorrect, if you will, to do something like "Just Say No" to kids or merely to go and talk to kids about condoms. There are a lot of traps in terms of any of those types of programs.

We decided that we wanted an approach that would reach out to as many different segments of the population as possible. So we tried to design activities and strategies that would reach out to young people themselves, that would reach out particularly to males, and you will see a lot of that played out in the media campaign that would reach out to policymakers so they would understand the importance of funding and institutionalizing. I was so pleased to see that

Claire had mentioned institutionalizing programs. Because here we are reinventing the wheel year after year. We seem to know a lot even though the researchers are saying we don't know enough. That's true. We don't know enough, but we know enough to get us going, to get us on a track and to really begin to develop some programs and to change some approaches.

What did we do in Maryland and why is it so different? For one thing, it was in the early or middle '80s that we began and the Governor established the Governor's Council on Adolescent Pregnancy. Politically no one wanted to do that. One of the last things our former governor, a Democrat leaving office, did was to establish the Governor's Council on Adolescent Pregnancy. And he said politically it was an issue that you could not win on because the pregnancy rates were not going to go down, so why pick an issue such as this that the community was so polarized on because of the abortion issue and that type of thing.

Then in comes William Donald Shaeffer who decided to really shake up the state and to do things very, very differently. Shaeffer decided to appoint me to develop a strategy for him. And again I went back to the research that you just heard. (There was no reason to reinvent the wheel.) The first thing we decided to do was to develop a way to delay sexual involvement for young people between the ages of 10 to 14 years of age. When I say "sexual involvement," quite honestly I mean delaying sexual intercourse. It doesn't bother with kissing and petting and all that type of stuff that other people rarely talk about. Primarily we were aiming a media campaign at kids 9- to 14 years of age. Why did we do that? Why were we aiming at that age group? Well, research has just shown you that young people between those ages are more than likely not sexually active, at least in the state of Maryland. All my work is really in the state of Maryland. Young people at those ages are not sexually active and still are not, the majority of them. So what's the message that we are giving them? The message is really a very clear one. We want them to delay sexual intercourse. We're trying to get them to delay as long as possible.

How are we getting that message out? Well, we decided to use the mass media, television, radio, billboards, posters, learning activities in schools. And we went to a large media firm, one of the largest in our state, and I met with the president of the firm. And the gentleman, Hal Donofrio, basically laughed in my face and was very upset that the state had allocated $100,000 for a media campaign.

Now I'll tell you that I thought then—this was in 1987—that $100,000 was a lot of money. I have since learned that $100,000 for a media campaign is not a lot of money. When I went to the media firm, quite honestly, the president was angered that the state would throw away $100,000 trying to get kids not to have sex. He thought it was ludicrous at best. So he asked me to leave. And I left.

And then a couple of weeks later he called me back because he had thought about it. He said he thought he could work with me and he had some conditions. The conditions are very interesting to note, and I'll put them out for you because they really relate to the issues of public health. First, he said let's do a media campaign and let's do a five year campaign. "I don't want any of this one year job that you do because it comes and goes. And you need a five year campaign because I think we want to try to show some cause and affect and the relationship between the media and what we are doing and whether kids are getting pregnant or having sex or anything like that." So we decided to do a five year campaign.

The second thing he wanted to do was to form a nonprofit organization. We had to form a nonprofit because we were going to do fundraising and we needed an organization that would take the money outside of government, quite honestly, so that we could get things done much more quickly.

The third thing he said was that he would do the fundraising, and he really won our hearts over at that point.

And the fourth thing was that we needed a million dollars a year, at which point my heart really did sink, because a million dollars a year is a lot of money. The last thing we wanted to do was to say, "We evaluate programs."

So what do you start with? We started with posters because they were cheap. And we did a lot of focus groups. We decided to aim it at different populations, because we thought that we had to keep the media fresh and alive. And so we did this for a number of years.

What I am getting ready to show you are the television commercials that are still playing in Maryland. The reel that you'll see is a few years old, but it is several years worth of work. We went to the schools, which are very similar to most state systems except in Maryland they have had for the past 22 years mandated sex education for grades K-12. We already at least had a basis for that in our school system. But to try to change anything, as all of you know I'm sure, you have to go to the local school boards.

Now Maryland is very small, but we have 24 local jurisdictions. I went to 24 school boards to sell them on this media campaign that we were doing at that time with posters, and also to try to get some learning activities into the school system. I will not be able to tell you the details of this now, but we used countless strategies to do that in terms of training school board members. And I think there are some valuable lessons to be learned from the state in regard to that.

The original campaign that we did was this:

From the video:

#1 (Parent speaking to son) "You have to do the right thing. What do you have to look forward to? Babies crying all night, dirty diapers. If you're going to have sex, you'd better be ready to be a father. You can't even keep your room clean."
(Narrator) "Talk to your kids about sex. If you need help, call this number."

#2 (Parent speaking to daughter) "Don't give me that look. You think you invented sex? Listen. My sister got pregnant when she was 17. She quit school. She lost her friends. She was alone. You think that boy you're seeing is ready to be a father? Wait, honey. Please wait. Nobody is saying sex is bad, but to a 13 year old? It will kill your dreams."
(Narrator) "Talk to your kids about sex. If you need help, call this number."

#3 (Baby crying)
(Narrator) "If you get pregnant, this is what the rest of your teenage years are going to sound like. You need a father so you don't go it alone. If you need help, call this number."

#4 (Narrator) "The epidemic of teen pregnancy is ravaging this nation. Even more disturbing, many of these little girls' lives are not being ruined by boys, but 20-, 25- and 30-year-old men. If you think having sex with a 14-year-old makes you more of a man, you obviously don't understand the meaning of the word."

#5 (Parent) "Listen up. You think if you get a girl pregnant, it's her problem, right? Wrong. For you it's all over. All she wrote. Even if her brother doesn't come looking for you, do you think I'm going to let you play like nothing happened? You'll be lucky to finish high school, never mind college. Start thinking with your head. You may be old enough to do it. You aren't old enough to handle it."
(Narrator) "Talk to your kids about sex. If you need help, call this number."

#6 (Teen boy) "My girlfriend dumped me. You know why? Because I wanted to have sex and she didn't. Man, what's her problem? I told her guys were different. They need it. And if she really loved me, she'd show me. Everybody does it. It's no big deal. I mean, do you want to be a virgin forever? Anyway she said she found someone who doesn't push her. Do you believe that? Someone who's nice. What's that make me?" (Camera close-up on frog.)

#7 (Teen boy) "Come on. Everybody does it."
(Teen girl) "Not me."
(Teen boy) "It's no big deal. Do you want to be a virgin forever?
(Teen girl) "You just don't get it."
(Teen boy) "Where are you going?"
(On screen) VIRGIN. (Narrator) "Teach a kid it's not a dirty word."

#8 (Narrator) "What do you call a guy who makes a baby and then flies the coop?"

(chicken noise)

#9 (Outside of a hospital delivery room, sound of young woman crying out with labor pains)
(Narrator) "Now you understand? Now you don't. If you are going to have sex, be ready to go it alone."

And the rest of them are all similar to the ones you just saw; those are what we put on first. We put those on television, and you can see that they encompassed a lot of different themes that the other panelists discussed earlier. I'm not going to go back and repeat them again.

But what else does a media campaign do? A lot of people think that a media campaign will get kids on their own to avoid having sex. That's not how it is. And I'm sure you're sophisticated enough to understand that. But what did it do for policymakers? Well, for one thing it enabled policymakers to point out to this media campaign as evidence that they did something in the state of Maryland for pregnancy prevention. It was adopted as a vehicle that they were able to talk about out on their campaign, because we eventually did a lot of things that have been discussed today, not just in terms of family life education and increased access to contraceptives, but also working with parents and getting community groups to accept a lot of what we were doing. The numbers are already starting to go down. So everybody wanted to jump on the bandwagon and say that they had something to do with what was happening in the state of Maryland.

But what else did it do? Well, it brought together a lot of people that had been polarized on this issue for many, many years. Pro-choice and right-to-life people who said they would never work together. We were able to get them together and sit down in a room and begin to plan a strategy of preventing adolescent pregnancy, which said to me that you can bring those groups together, not that you're going to get them to agree on all aspects of the issue. I think it's a waste of time to attempt to do that, but you can get them to work on various parts of the issue that they agree on. If they think that family life education in schools is the way to go, then work with them to get that implemented in the school system. If it is a condom distribution program, then let them work with teens where they are.

We need a continuum in terms of services that we should not as a group say, "Well you're going to do it my way." Because that's the way that none of us, particularly the kids, win. None of us win with a "my way" approach. I think you need a whole continuum of services that bring a whole variety of people together and try to reach as many kids as you can.

Another thing that I think you can see is that we really reached out for males. And we did that not just with this media campaign, but also with the posters. You can see that the posters are aimed towards young men and male responsibility and have a strong message about child support. That is part of the message that you get in that material. The later things that we did were like this one.

This one is an AIDS presentation one. The last one ("VIRGIN) is a takeoff really, a billboard, that went over very well. And the reason that it is an odd size like that is because it is the inside of a bus. We use buses, we use anything in Maryland to do advertising: billboards, buses, all types of media, radio, television.

We used radio commercials to try to get people attuned to the fact that we were going to do a media campaign. This campaign has been going on, as I said, since about 1987. A number of states are interested and attempting to replicate it, primarily the states around Maryland. We've been working with them—New Jersey, Delaware, Virginia. And we're working with them in terms of getting them to use it, because we are really interested in whether they can use this media campaign along with some of the other programs that I mentioned involving access to contraceptives, as well as the curriculum skills and development. We are very interested in seeing if we can make some changes in those three states as well.

Bronwyn Mayden Handout #3

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